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THRILLING WONDER STORIES

15¢

SPRING
ISSUE

STAR OF TREASURE
An Astounding Novel
By CHARLES W.
HARBAUGH



Thrilling WONDER Stories

SPRING 1944

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OF ASTELLAR
A Fantastic Novelet
By LEIGH BRACKETT

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THRILLING WONDER STORIES

The Magazine of Prophetic Fiction



Vol. XXV, No. 3
Spring, 1944

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May, 1944, issue

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A Department Conducted by SERGEANT SATURN

HEAVE ho, my space lads and lassies, and let's start a fresh ether vortex by making with the mail sacks. Talk about your V-mail! The old Sarge is going to have to invent a microfilm mail attachment—like the possible newspapers of the future—so we can crowd in this department all the mail for you birds to mull over.

Don't start muttering in your beard, Junior; the senior astrogator has to warn you little ogres right here that we can't begin to take on the cargo of communiques which has reached the astrogation chamber in time for this voyage. Such popularity ought to be deserved, and the old space dog revels in the snowstorm of mail which billows around his control panel. BUT we simply can't print it all.

If your letter doesn't appear, don't snarl at the senior astrogator. Just send me another flash, and we'll hope for better luck next time.

Okay, Frog-eyes, slit open the mail pouch so we can take a cross-sampling of the brick-and-bouquet brigade. Or should I say, the groan-and-grunt gang. We'll start things off with this full head of gas.

DEAREST SARGE

By Guy Trucano, Jr.

Sarge, you are the dearest sarge I know! No other sarge would take what we give you! Oh, by the way, wanna know a good way to start and be the centerpiece of a riot. Just yell "Hurray for Willkie" at a public gathering, especially a basketball game. Guaranteed to work. Another way is to say "Hurray for Ray Cummings" in your column, and I hereby do. But now back to the uninteresting matters, namely current issue of TWS. It really isn't that bad, though.

I, to be different, will rate the stories on a percentage basis. Nobody seems to have thought of this, and it is quite simple. Anything above 95% perfect gets the same sorta sigh a girl gives a sailor, around here. Anything less than 67% could definitely be better.

A God Named Kroo... 98%. It's a swell story, especially since it gives a subject for brain exercise. One question, though. It probably would have spoiled the story, but why couldn't Kroo have blasted the dynamos with lightning, and just how did he get killed?

Invisible Army... 90%. I thought it would turn out to be just another man-gets-somewhere-else-and-wins-the-fight-and-the-girl story, but it had something different.

Space Command... 80%. So the abused skipper saves the crew, and then beats hell out of the mate, and then they're jolly friends. How nice!

Well written, though.

Venusian Nightmare... 75%. Nice writing, but it seemed to have too much of an abrupt ending. It seemed like more should follow. The first of a series, maybe yes?

Trophy... 87%. Swell, wonderful, but the illustration, for once, was too accurate! Why did that dame have to look so wild???? Darn it!

Moon Trap... 80%. Nothing much to say about it. Better than average.

Swing Your Lady... 85% One every issue, Sarge.

I think this all averages up to 85%, or Good! Issue was really worth reading. And I am a particular fellow.

Karden: Sarge loves Ray Cummings every bit as much as Chad and I do. By the way, Sarge, where is Ray this time? Still Karden: The verdict for more Lotos Eaters is not unanimous, and it isn't because I object to fantasy either, as someone states. I prefer fantasy, if anything, but I don't like this one. Maybe you can argue me into liking it.

Someone once said that the border line between a genius and an idiot was thin, or that an idiot was an advanced genius or vice-versa. Better not raise our I. Q. any, Sarge, or you might have a few more idiots on your hands, out of us geniuses.

Come, come, Sarge, don't take all those lowbrow remarks by Stoy too hard. You don't talk enough, and far be it from us to judge the language you use!

Look, Sarge. Maybe these letters are too low-brow for some readers. But, that's the only reason I and, I hope, a lot of other guys read 'em. It's humor in a world too grim and laughless. As Chad says, a lot of people would stop buying the mag if you stop the Reader's Viewpoints, and a lot of your readers would stop writing in, if they couldn't maybe say what they thought, and the way they thought it. After all that's the thing we're fighting for. Let everybody in on it.

I disagree with Wilhite about "Who cares what someone else thinks?" Maybe it doesn't change my opinion any, but I still care. If everybody felt that way, there would be no readers' departments.

Fifteen cheers and a bottle of Xeno—for Gray and his stand on covers. Someone brightly remarks that you haven't had BEM's for two covers, but spaceships instead. Then says that is getting out of the rut; sure it is but like a bicyclist switching from the left side of a country road to the right. A lot of sense to it, too!

Enclosed find application for the Science Fiction League, and where is the nearest chapter?—Box 1094, Dickinson, N. Dak.

To answer your questions, Pee-lot Trucano, Ray Cummings is still up and atom. You'll run headlong into one of his Tubby stories right in this issue. As to where the nearest functioning SFL chapter is to you, I frankly don't know. Some of you members out Dakota way throw Kiwi Trucano a tight beam, won't you? Pull him in out of the ether drift

(Continued on page 10)



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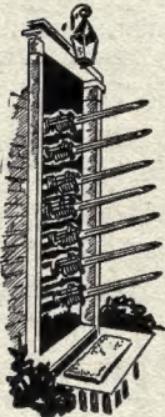
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As prices rise, people will ask for—and, in many cases, get—higher wages. That will put up the cost of manufacturing, so up will go prices again. Then we'll need another pay raise. If we get it, prices rise again. It's a vicious circle.

The Government has done a lot to help keep prices down. But the Government can't do it all alone. It needs *your help!*

Your part in this fight won't be easy. It may even mean doing without a few necessities. Tough? Maybe... but don't say that where the veterans of Italy and New Britain can hear you!

You *want* to do your part, of course. So do we all... farmers, laborers, white-collar workers, business executives. And the way to do your part *right* now is to observe the following seven rules...

1. Buy only what you NEED. And before you buy anything, remember that patriotic little jingle: "Use it up. Wear it out. Make it do or do without."

2. Keep your OWN prices DOWN! If you sell goods, or your own time and labor, *don't ask for more money* than you absolutely must! No matter who tries to talk you into asking more... *don't listen!*

3. No matter how badly you need something... never pay more than the posted ceiling price! Don't buy rationed goods without giving up the required coupons. If you do, you're helping the Black Market gang.

4. Pay your taxes cheerfully! Taxes are the cheapest way to pay for a war! The **MORE** taxes you pay now—when you have some extra money—the **LESS** taxes you'll pay later on!

5. Pay off old debts. Don't make any new ones! *Get, and stay, square with the world!*

6. Start a savings account. Make regular deposits, often! Buy life insurance. Keep your premiums paid up.

7. Buy War Bonds... regularly and often! *And hold on to them!* Don't just buy them with spare cash you can easily do without. Invest every dime and dollar you don't actually NEED... even if it *hurts* to give those dimes and dollars up!

**Use It up... Wear It out.
Make It do... Or do without.**



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THE READER SPEAKS

(Continued from page 6)

before he gasses himself to death.

Let's give an ear to this peo-let who is clamoring for attention.

VIVISECTION

By Rolf Brown

Dear Sarge: I have just finished reading the Winter issue of THRILLING WONDER STORIES; now to dissect it. First the cover, and what a cover! Belarski did a very good job on it, which is more than some of the other mad Rembrandts do.

Now to the stories. Usually the readers rate the stories in Jugs of Xeno, but I, feeling a little more generous, shall rate the stories with Xeno distilleries.

(1) "A God Named Kroo" is worth 9 distilleries with extra mash thrown in.

(2) "The Invisible Army" is good. Worth 7 1/2 distilleries. His scientific reasoning was off a bit though. He mentioned the Brownian movement. I quote, "At normal size, billions of molecules bombard us at once. At any one second, there may be more on our left side than on our right, but the percentage of difference is so small it passes unnoticed."

"At microscopic size, the difference is appreciable. There are fewer molecules in a given area then. If a million of them strike us on the side while eight hundred thousand strike the other, we'd notice the difference. In fact, we did notice it. That was the wind that had us crazy down there."

Well, to get down to rock bottom, what is wind? According to Webster, wind is *air in motion*. Now, what is air composed of? Answer oxygen, nitrogen, neon, carbon dioxide and other elements and molecules. Yet Mr. Rocklynne has part of the atoms and molecules within the force field at normal size and the rest at infinitesimal minuteness. How DOES he do it?

On with the mayhem!

(3-4) "Trophy" and "Space Command" O.K. for 7 apecie.

(5) "Swing Your Lady." Very good. Let's have more of the same. Good for 9 distilleries and a pound of radium chloride.

(6) "Moon Trap." Good for an amateur, no offense meant. Worth 6.

(7) "Venusian Nightmare." For this, Sarge, you pay me. All I can recommend for this publisher's greatest blunder is a quick, quiet painless death; out of this system, please.—829 Chestnut, Joplin, Missouri.

Well, since this communiqué is more of a diatribe about the Winter issue than anything else, I'll just pass it along to you other peo-lets for comparison with your own opinion. Naw, naw, you ain't gonna get the old Sarge tangled up in an argument about the Brownian Movement versus Ross Rocklynne's yarn. You take that matter up with the author. The old Sarge could ask how a lot of people do a lot of queer things. But I won't. It's too early in the year to start another sidereal movement. We will now listen to a brief warble out of Waible on the same subject.

THE HOPE OF SPACE

By G. Waible

Dear Sarge: Cackling fiendishly, I thrust the Winter T.W.S. beneath the startled news-dealer's prehensile red beak and dropped three rusty nickels down the back of his neck.

He gave the horrible green Gorgon a stony gaze and rocked back on his heels.

"Belarski sure took a lot for granite," he grated in his gravel-like voice.

"Please don't scream! You're driving me stone-deaf!" I shrieked, meanwhile shaking the pebbles out of my ears.

(You probably won't get the above unless you studied Greek Mythology, but then you won't be mything much, anyhow.)

A God Named Kroo seems to be the best of the

(Continued on page 104)



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WHENCE came the knowledge that built the Pyramids and the mighty Temples of the Pharaohs? Civilization began in the Nile Valley centuries ago. Where did its first builders acquire their astounding wisdom that started man on his upward climb? Beginning with naught they overcame nature's forces and gave the world its first sciences and arts. Did their knowledge come from a race now submerged beneath the sea, or were they touched with Infinite inspiration? From what concealed source came the wisdom that produced such characters as Amenhotep IV, Leonardo da Vinci, Isaac Newton, and a host of others?

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STAR OF TREASURE

By CHARLES W. HARBAUGH

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CHAPTER I

A Night in First City

PROFESSOR PERICLES OLIPHANT saw the red flash from the guard's octangle and felt his little airship slow as its power was cut off. He pulled in beside the platform and switched to parking beam. A truculent, heavy-featured guard waited there.

He stood on an octangular platform, power-suspended at the thousand-foot level

over New York City. Behind him lay the glittering wealth of the greatest city in two worlds. It was night and, like a sea of unimagined proportions, the city reached from horizon to horizon, washed with waves of light. Tall slim buildings reached skyward through the netted groundwork of highway levels, their sides glowing with luminescent material. Other buildings hung in the sky like the guard's octangle, some at the five-hundred-foot level, others at the thousand. Pillars of pure radiant energy poured up against their foundations from

projectors on the ground, holding them firmly in place.

Superimposed over this rich scene were the darting lights of countless private and commercial airships, weaving intricate leitmotifs against the symphonic background of the city.

As the professor nudged his airship alongside the platform, he felt a keen sense of regret, for the beauty he saw spread before him was a captive loveliness. Standing before it, the figure of the guard seemed to overshadow it. He and the forces he represented did actually overshadow any beauty on Earth, for he was a minion of the harsh, inhuman government of the Ninth Diktor.

"Title and number?" the guard barked, thrusting his head through the lowered window of the professor's airship.

"I am Professor Pericles Oliphant," the small, grey-haired pilot replied quietly.

The guard's face darkened.

"It is not permitted to use decadent personal symbols! What is your title and number?"

Professor Oliphant grimaced.

"I am Pog one-three-four-nine. Dash it all, why did you cut off my power?"

"I ain't supposed to tell no one," the guard said, "but if you was to go down to the main traffic level you could hear the news coming over the amplifiers. It's bein' broadcast all over town by the Stapo. There's a rebel loose in First City!"

"Rebel? Indeed!" the professor said curiously. "I wasn't aware of any revolution. Who is he?"

"Lance Crosse," the guard replied. "The Martian. He got past the Space Patrol and landed somewhere. The Stapo is trying to find him. There's a reward for his body if anyone's lucky enough to shoot him."

The professor's manner had changed strangely during the guard's speech. He reached for his controls quickly.

"Thank you, my man," he said. "If you'll shut off that neutralizer, I'll be on my way."

Sliding from the octangle, the professor's thoughts were busy. A week ago he did not know such a person as Lance Crosse existed until the name appeared in his thoughts. Appeared was the right word!

He had been working over his lecture notes on basic energy when suddenly "Lance Crosse—Lance Crosse" resounded through his brain. Another man might have thought himself mad, but the professor had merely laid aside his work and adjusted his glasses.

"Amazing!" he'd commented. "A thought injector actually in operation. I wonder who is operating it?"

Once every day since then, the same name had been forced into his brain. Finally, one night before, a more complete message came through.

"Lance Crosse wishes to meet Professor Pericles Oliphant at the National Museum at midnight on the fourth day of Solter—Solter fourth, at midnight. This is Lance Crosse of Xanadu, Mars, calling Professor Oliphant of New York City, renamed First City by a recent tyrant government."

No further explanation or clue was given to reveal the identity of the person Lance Crosse. However, the professor knew quite well that he would do as requested. He had not quite perfected his own thought injector, and professional jealousy demanded he be present. But if Lance Crosse were a rebel—the situation became more delicate.

When he swung away from the guard's octangle at moderate speed, he could lean out of the cabin window and hear the rumble of the powerful Stapo amplifiers far below. They shouted their warning to all citizens, forbidding them from meeting or aiding the Martian rebel on pain of instant death.

THE National Museum loomed ahead, and the professor cut his speed. Like most municipal buildings, the museum was power-hung at the thousand-foot level. Since the development of cheap power from liquid oxygen and its catalysts, no scheme was too fantastic. The world of the Ninth Diktor reveled in a wealth of power that, in another age and under another form of government, might have created a true Nirvana on earth.

The professor dropped his ship to the spacious landing roof of the museum. It was an ugly building, a great rectangular box around the middle of which ran a balustraded balcony. The airship had barely touched the roof, when the professor's brain rocked with the impact of a foreign thought thrust suddenly into it—Crosse's thought injector!

"Crosse speaking, professor," the words ran. "I am lying five hundred yards north of the museum in an unlighted ship. Can you make some sort of signal we can see from here?"

Professor Oliphant stepped from his ship. There were three other airships resting on the broad roof. A museum guard lounged up and told him the place was closed.



"Father!" Nancy called. "They're catching up with us. Hurry!"

"I know," the professor replied. "I just came up to let the wind blow the cobwebs out of my thoughts."

The guard left. Oliphant descended to the balcony. He sought the protection of a corner where he could watch the guard on the roof from this position. When the fellow sauntered out of sight, the professor produced a stubby pipe from his pocket, packed it, and lit it with a chemical lighter of his own invention.

In the wind, the lighter glowed red and hot. After he had his pipe going, the professor waved the lighter high above his head. Instantly his brain sang with injected thoughts—their strength and clarity indicating a short distance of transmission.

"Is the red light yours? Dip it! Thank you, professor. As soon as it is safe to come alongside, wave the light again."

Professor Oliphant watched the guard narrowly until the man disappeared into the museum. The red pipe lighter swayed back and forth through the darkness.

Out of the night, a great black shape bulged. It was a huge warship, fully as long as the museum itself. Professor Oliphant gasped as he made out its lines.

A port opened in the side of the ship. For a moment, the faint glow of blue battle lights was visible. Two men leaped to the balustrade, then the warship drifted back into the night.

Both were clad in Earth clothes with Martian cloaks about their shoulders. One, a tall muscular giant, stepped up to the professor.

"I am Lance Crosse," he said simply, holding out his hand.

The faint reflected glow from the city outlined a powerful body and lean, heavily tanned face. His hair was snow white, result of a rash landing on the mysterious, clouded planet of Venus, where the cold light does strange things to human pigmentation.

White teeth flashed in a sudden, fleeting smile as the young man squeezed the professor's hand.

"Glad you came, professor," the rebel continued. "This is Peter Zember." He gestured toward the man who had leaped from the spaceship with him—a man not quite as tall as Crosse and lanky to the point of gauntness.

"Delighted," the professor acknowledged. "Now, Crosse, I'd like to know about that thought injector of yours—"

"Sorry, professor," Crosse interrupted. "No time for that now."

SILENTLY, the professor indicated where the man had gone. Crosse nodded.

"We'll use the plan agreed upon, Zember," he said swiftly. "Wait for us on the landing roof, professor."

Before the old man could ask another question, the two men melted into the dark shadows along the walls. Shrugging, he started up the stairs to the roof. Halfway up, he heard the sound of shattered glass. A siren began to moan.

"Quickly, Zember! Inside!" Crosse shouted.

The professor knew that the burglar siren was radio-equipped. Soon a cruising Stapo ship would be on their necks. He mounted quickly to the roof and hastened toward his airship.

The guard appeared on the roof.

"You, there! Stop!" the man shouted.

Knowing he was no match for a younger man, the professor sighed and halted.

"Now, then! What's this all about?"

Professor Oliphant pursed his lips.

"Mice?" he suggested helpfully.

The guard snarled and grasped him by the collar.

"Playing games, are you?" he roared. "Wait'll the Stapo gets here!"

A thin high wail cleaved through the deeper note of the burglar siren. A flashing red searchlight appeared against the pale skies, and, seconds later, a slim patrol ship slid to the landing roof. Stapo men poured out of it.

"What is this, guard?" one of them cried. He wore the cape and cap of an officer, but he looked even more brutal.

The guard swiftly recounted the professor's appearance at the museum and the subsequent smashing of a window.

"Ah!" the Stapo officer snapped. "Attempting to steal the property of the state—traitor?"

With the back of his hand, he struck the professor a powerful blow across the mouth that sent the frail little man reeling.

"Symbol and number!" the officer barked. The professor glared at him.

"My name is Professor Pericles Oliphant!"

The officer took a step forward and raised his hand threateningly again.

"It is a crime to use names!" he thundered. "Answer!"

"I'll be hanged if I'll use that silly title!" the professor cried stubbornly. "It's undignified." But he saw the officer loosen his bolt gun in its scabbard and knew his life

hung on a perilously slender thread.

"Pog," he sighed. "I am Pog one-three-four-nine."

The officer was evidently surprised at hearing so important a symbol. He stepped back, uncertain of what to say.

"We must be on the alert," he cried defensively. "The treacherous rebel Lance Crosse is in First City."

A bolt gun went off in the museum below, echoing hollowly. Another shot followed the first, then someone uttered a triumphant shout. One of the Stapo men appeared on the stairs, shoving before him the caped Martian rebel, Lance Crosse.

"Ah!" the officer of Stapo said in vast satisfaction. "Crosse was here! You, Pog, what do you know of this man? Confess! Your symbol will not help you now."

"Crosse? Crosse?" the professor repeated vaguely, as if trying to remember where he had heard the name before.

The officer struck him again.

"Do not trifl, Pog!" he roared. "I am a man of short temper!"

CHAPTER II

Pirate's Grandson

THIS admission was the last he ever made. Crosse ducked low and sent his captor flying over his shoulder. In another moment he was at the Stapo officer's throat.

"You rotten little tyrant!" Crosse grated. Steel fingers clamped about the man's neck and tightened. The officer's eyes bulged frantically, and he clawed at the young giant who held him. Then a quick snap ended the struggle.

The remaining Stapo men leaped on Crosse, struggling to beat him with their weapons. They did not dare discharge a bolt at such close quarters. Stepping back from the fight, the professor fumbled for his pipe lighter and waved it frantically in the air. The dark bulk of the Martian spaceship appeared in response to the signal.

Zember came bounding up the stairs from the museum and threw himself into the battle. As the spaceship came alongside, ports opened and dozens of cloaked rebels leaped to the balcony. They obliterated the struggling Stapo police. Soon the fight was over.

"Are you all right, sir?" Crosse called, striding toward the professor.

"Yes—I guess so," the little man replied. The Stapo officer had injured his pride more than his face. "Brutes!" he added bitterly.

Crosse smiled grimly.

"A mild word for their kind, sir. Do you blame us for being rebels?"

"What are they doing?" the professor asked, pointing toward the Martians who were busily lining up the beaten Stapo men.

"Giving them a taste of their own justice," Crosse replied harshly. "The Stapo is noted for its trial without jury, so—" Raising his voice, he shouted, "Druff! Come here."

A young man in the simple dress of a Martian colonist hurried to Crosse's side.

"Meet Captain Druff, professor," Crosse said. Then to the Martian, "You're in command of the spaceship, Druff. The professor and I are going to his laboratory. We'll use his airship. Take a position at thirty thousand feet over the museum and wait for us."

"Sure thing, Crosse," the captain replied with characteristic Martian informality. "What'll we do with these Stapo hounds?"

"Whatever you like. Oh, yes!" He reached under his jacket and drew out a heavy, leather-bound volume. "Here's Tragg's diary. Guard it with your life."

"Right!" the captain said and swung away to supervise the execution of the Stapo crew.

"What is the meaning of all this, Mr. Crosse?" Professor Oliphant asked. "Why are we going to my laboratory?"

"You'll want to take your papers and books and few clothes with you when you leave for Mars," the rebel told him gravely.

"Mars!"

Crosse nodded.

"I came to Earth for two things—one is the book I just gave Druff—you're the other."

"But I—"

"Shall we go?" He took the professor by the arm and ushered him toward the little airship. He unlatched one of the doors to the cabin of the airship and swung in, motioning the professor to take the pilot's seat.

"Confound it!" the professor cried irritably. "I won't budge an inch until you tell me what this is all about."

"Please, sir," Crosse interrupted. "I'll answer all your questions, but we must leave immediately. There are more Stapo patrol ships on the way."

The great warship had already taken its crew aboard and was swinging away from the museum. Professor Oliphant glared at Crosse, but his anger melted.

"Very well," he chuckled. "Whoever you are, young man, you're fighting the Ninth Diktor and his secret police and that's to your favor."

The thin wail of police sirens caused him to take his seat hurriedly and put the little airship into a quick climb. As they swung clear of the roof, the airship dipped suddenly and began to fall.

"They've cut off your power!" Crosse cried. "I'd forgotten you operated on transmitted power, curse it!"

The professor winked broadly and reached under the regulation instrument panel for another set of controls.

"I'm hardly the man to trust the government power supply, Crosse. This ship has an atomic-powered auxiliary."

"Atomic-powered!" Crosse gasped. "I didn't know that an efficient motor had been built on the atomic principle."

Professor Oliphant peered at the blinking red lights rising to intercept the falling airship.

"I've never bothered to market it," he explained. "I've been too busy with my research, so I just built this one motor for my own use and then forgot about it."

STAPO ships were closing in, and the neutralizing ray with which they cut off the flow of transmitted power was stronger. A bolt gun set in the bow of one patrol ship barked, and blue flame made the night livid.

The professor touched a plastic-handled lever that looked as innocent as a cowl adjustment and moved it ahead. Crosse felt his seat leap forward as the airship accelerated. The blood left his head, but the sensation soon passed, and he peered eagerly out of a window. The pattern of city lights below had merged into a confused blur.

He turned to the professor in admiration.

"How fast are we going?" The professor pointed at the air-speed indicator. The needle was jammed at the stop post where the last calibration read one thousand miles an hour.

"I don't know how fast we're going, Crosse. I've never had occasion to use full power before."

Adjusting the plastic lever, he slowed the ship, and the pattern of lights became orderly once more.

"We're free of those Stapo ships now," he remarked cheerfully. "Suppose you tell me why you're here. I warn you, my daughter will have something to say about going to Mars! But what is it you want of me?"

"I want you," Lance Crosse replied, "to build a ship that will take me to the star Sirius."

Professor Oliphant's jaw dropped.

"You're joking!" he cried. "It's impossible!"

"I never joked less in my life, sir. I must go to Sirius, and I believe you are the only man who can take me there."

"You're mad," the professor declared. "No one has ever ventured beyond the limits of our solar system!"

"One man has gone out into space—as far as Sirius—and returned to tell the tale."

The professor snorted with disgust.

"Old wives' tales, Crosse! Look here, this nonsense you're prattling is incredible."

"Edward Tragg went to Sirius," Crosse insisted. "He made the trip seventy years ago in a ship of his own design and construction."

"My word!" Oliphant gasped. "Don't tell me you believe all the stories you hear about that old liar and space pirate!"

"Let me explain just why I believe this particular story, sir," Crosse begged. "I'm no scientist. I don't give a hoot about all the science in the solar system. At the moment, I am fighting for freedom. I'm fighting a rotten, archaic Earth government that bleeds the very life blood from its own colony on Mars."

"This revolution is my life—not dabbling in science or pirate stories. But there is one hope—and only one hope—that we can drive out the Ninth Diktor's governor, and that is the treasure of Edward Tragg!"

In spite of Crosse's fiery words, the professor broke into a hearty laugh.

"Tragg's treasure!" he cried. "El Dorado! You know, of course, that not less than a hundred expeditions have ransacked the solar system from one end to another with never a trace of it."

"Of course!" Crosse declared heatedly.

"They restricted their search to the solar system. Actually it was buried far beyond their reach—in a place inaccessible to their limited imaginations."

Professor Oliphant saw the light. Forgetting his controls for the moment, he stared at Crosse.

"You mean that Tragg buried his treasure on Sirius?"

"That's it, sir. Tragg took his swag and carted it off to one of the planets of Sirius. It's there right now."

The professor was disturbed. Crosse's sincerity could not be doubted.

"Are you trying to sell me a bill of goods, young man?" he asked sharply. "Do you want me to put up money?"

"Not at all!" said Crosse. "I'll put up the money for you to build a ship that will go to Sirius. There's my story in a nutshell."

PROFESSOR OLIPHANT inspected his companion through narrowed eyes. It was obvious he meant what he said. Moreover, his manner was engaging. The professor's suspicions vanished.

"I'm sorry, Crosse, but it's impossible. Yet I'm fascinated with the idea. What makes you think I could build such a ship?"

"Two things make me feel sure you can build that ship. One is the diary Zember and I just stole from the National Museum. It's Tragg's diary. The other is the speech you almost, but not quite, delivered at the last Science Forum."

"How did you know about that?" the old man asked quickly.

"We on Mars were listening to the radio broadcast from the Forum, and your introductory words caught our attention. Then that fool of a Diktor interrupted with one of his military displays, and we never knew what you were going to say."

"Pompous old ass!" the professor snorted indignantly. "Tergon 1-1 fancies himself a scientist, you know. Absurd!"

"Yet that one sentence of yours revealed to us that you knew a mighty secret," Crosse insisted. "You said, 'Gentlemen, I have discovered the secret of life itself.'"

"Vain of me, you think?"

"Not at all," Crosse assured him. "But it told us that you had rediscovered the one secret that all scientists strive for, whether they realize it or not."

The professor's smile faded.

"Rediscovered?" he asked sharply.

Crosse hesitated, casting a sidelong glance at the bearded old man.

"Yes, sir. Edward Tragg discovered it and put it to practical use in his flight to Sirius."

"Poppycock!" the professor roared, his face reddening. "I tell you the principle of basic energy is entirely new!" He paused, then sighed. "Did he really discover basic

energy, Crosse?"

The Martian nodded.

"He called it life flow, but I believe they are one and the same. In searching through the accounts of Tragg's life, I found vague references to a trip through outer space. Wherever such mention was made, there was always a veiled reference to this strange, all-powerful force called life flow."

An expression of doubt appeared on the professor's features.

"If Tragg knew of basic energy, it's barely possible that he may have— No, no!" He interrupted himself violently. "It's incredible!"

Crosse rubbed his chin.

"Of course," he said with studied casualness, "the fact that Tragg discovered basic energy before you does not detract from your achievement. Tragg never published his findings. As far as future historians are concerned—you will be the only discoverer."

"Do you think so, Crosse?" the professor asked eagerly. But he was a man of humor, even when the joke was on himself, and a smile crossed his lips. "I suspect you of plying me with a little flattery, Crosse."

"Certainly, but only to convince you of the absolute necessity of your coming to Mars with us."

"I'll go to Mars with you," the professor agreed slowly. "I must know how much Tragg discovered. How did you first learn of this—this life flow of his?"

"My mother was Edward Tragg's daughter," Crosse replied in a strangely soft voice. "She died when I was very young. But she left me all her writings and what she could save of my grandfather's after he was trapped by the Space Patrol and put to death. Among them was a book of sonnets Tragg had written in which one poem was carefully marked."

"Good Lord!" the professor cried. "Was Tragg a poet, too?"

"The world has much to learn of Edward Tragg," Crosse replied seriously. "My grandfather was undeniably a pirate and acquired an immense, ill-gotten fortune from the Martian trade, but he was nonetheless a great scientist."

"Pirating was only an avocation of his—and perhaps a supreme gesture of his contempt for the world of the Eighth Dikter. I can show you some excellent paintings he did, and everyone knows the stirring music he wrote."

"But little of his written work, including his poetry, is known. His diary is—or rather

was—at the National Museum for all to see. But I needed that diary as a link in the chain that will lead me to Tragg's treasure."

"This book of sonnets—" the professor remrmed.

"My mother left me the volume, marking one verse for my particular attention. I know it by heart—

"Hold me locked within thine heart's embrace;

My words of love inscribe in thy chaste Diary of lover's deed and words.

Over heart with roses Cupid girds A love-enticing woman for his mate.

Flame meets flame and, burning, strikes a Fate.

Read well, oh cherished darling, love's plea, Marked importunately, as you see.

Words are these: but words not wild or free."

CHAPTER III

Getaway

PROF. OLIPHANT wrinkled his nose with distaste.

"Rather vague isn't it?"

"Precisely," Crosse agreed. "Even if my mother hadn't marked that verse, I'd have noticed it. It stands out from the other brilliant pieces like fire in the night. It's not even a sonnet.

"The words mean exactly nothing—and Edward Tragg never wrote words without meaning. But if you take the first word of each line, you find the true meaning of that verse. They read, 'Hold my diary over a flame. Read marked words.'"

The professor was silent as he turned his attention to maneuvering the swift little airship down toward the scattered suburban lights below. Finally he turned to the young man beside him, just as they were poised for their landing.

"What you have told me is absolutely preposterous, Crosse," he said. "Why should Tragg take his treasure to Sirius? Such insane avarice doesn't jibe with the character of the pirate, seems to me.

"And more important—what good is Tragg's treasure going to do your blessed revolution? If you want money, why don't you go out and pirate for it the way your grandfather did?"

Crosse flashed his swift smile.

"I knew you wouldn't be taken in by superficialities, sir! First, I want to explain Tragg's treasure, as you ought to know, has been the El Dorado for adventurers throughout the past generation. Those words — 'Tragg's treasure' — Mean something!

"My people on Mars are convinced success will be theirs if they only can lay their hands on it. Druff and I have plied them with careful propaganda to insure just that.

"But Tragg's treasure is more than wealth. There are vague tantalizing references through his writings of a strange new weapon—and that weapon is connected with Tragg's trip to Sirius."

"I thought there was more to it," the professor nodded. "Very well, Crosse, I'll go to Mars with you. You may be a lying scoundrel, but if what you say is true, I want to go along."

"I knew it, Professor Oliphant. No man with half a heart could resist the temptation. We can leave as soon as you have packed what things you need."

The airship descended lightly to the private landing stage over the professor's laboratory. The two men stepped out.

"What's that, professor?" Crosse asked sharply, pointing at another airship emblazoned with official emblems.

"Possibly my daughter is entertaining a visitor." He shook his head. "A problem, that girl. It's my own fault, really. Never had the time to raise her properly after her mother died. She has delusions of grandeur. Likes men of rank and power. Very easily swayed by superficialities."

Muttering these regretful words, the professor led the way to an elevator. He and Crosse descended to the ground floor where the living quarters were located.

"Come in here, Crosse, and make yourself comfortable while I get my things together," the professor said, indicating a large informal room.

"You'd better hurry, sir, the Stapo will—" Crosse's words died in his throat.

Two people already occupied the room. One was a slender girl with light brown hair and vibrant eyes. Beside her sat a man whose face was known to every citizen on Earth.

He was tall—almost as tall as Crosse—and heavy. In an inflexible, granite way Carro Blake was handsome.

Blake rose, his heavy-lidded, suspicious eyes fastened on Lance Crosse.

"Excuse me, Nancy," the professor said

mildly. "I didn't mean to interrupt."

The girl rose to her feet. Crosse noted her exquisite figure and delicately molded features.

"You're not interrupting at all, father," she replied in a low musical voice. "I am glad you're here because your house is honored by a very famous man tonight—Carro Blake. Ooh! I forgot! He says names are decadent personal symbols, daddy. We must call him Tergon One-Two."

"Tergon!" the professor gasped. Tergon was the symbol reserved for only two men. One was the Ninth Diktor, the other was Blake, head of the Secret Stapo police.

"Father!" Nancy Oliphant cried. "Mr. Blake—Tergon, is a great man. You should be proud to have him as your guest."

Her words rang hollowly in the profound silence. Glancing from one man to another, she faltered.

"What's the matter?" she whispered anxiously.

"You!" Blake said heavily, nodding at Crosse. "You're Lance Crosse, the rebel!"

FIRE flashed in the young man's eyes. Then a grave smile touched his lips lightly, and he bowed in mock homage to Blake.

"You!" he said, matching Blake's tone. "You are Tergon One-Two, the tyrant! Second only in personal corruption to Tergon One-One, our sainted Diktor, may his soul rot in perdition!"

Blake's face went white.

"You fool!" he growled. "No man can utter such words and live."

He strode confidently toward Crosse, sure of his bulky muscles and the aura of dread that hangs about any Stapo man. Crouching slightly, Crosse measured the potential capacity of the bulky muscles, but was not at

all aware of the aura. Blake stopped one pace from the Martian.

"You're under arrest!" he announced.

"Think so?" Crosse asked softly.

Blake was used to seeing men cringe and fawn before him, worshipping his life-and-death authority. This was something new, and the taunt stopped him. But his confidence was supreme, and he was no coward. Growling a curse, he went for Crosse.

The Martian evaded the first crushing blows, replied with light jabs, feeling his man out. Blake took the jabs with a grunt, and Crosse realized that his adversary was no sybarite. Blake was hard in body and mind, and he was clever in the way that hunting animals are clever.

His eyes narrowed to slits as he sought an opportunity to break through Crosse's guard and hammer him down. Crosse fought cautiously, knowing it would be hard to recover from such an attack once it got underway.

But Crosse had no intention of losing. He took a few blows, rolling with them to make Blake expend his strength. He waited with keen expectancy for a certain sign. When it came, a grim smile appeared on his lips.

Blake began to breathe hard. Blake was no match in endurance for a hard-bitten Martian colonist. Crosse closed in, driving blow after blow at Blake's face. The heavy man, in a wild effort to protect himself, lost his wind altogether. He panted like a dog as Crosse closed in on him.

He was far from out, however. One of his massive fists clipped the Martian's chin and set him back on his heels. Crosse shook his head, and a trickle of blood appeared at the corner of his mouth. But he could take punishment. He caught Blake with a strong

[Turn page]

TEST SIGHT

TASTE RIGHT

If the ladder is placed against building, how far up will it reach?



ANSWER.

It will reach exactly to the top of the building.



left to the face.

The blow glanced off Blake's nose, causing excruciating pain. It paralyzed him momentarily, and Crosse lashed out with an uppercut, putting all his weight into the drive. Blake's head snapped back, and he slumped to the floor.

Crosse stepped back. His breath was just beginning to come fast and hard, and the wild rage in his eyes made him terrible to behold.

"I wonder," Professor Oliphant remarked, gazing at the unconscious Stapo chief, "how many men would have given their souls to do that!"

Lance Crosse grinned, and the tension eased out of his body. He wiped the blood from his chin.

"That's a token payment for some of the official murders he commits every day."

Professor Oliphant's daughter still stood erect, her face drained of blood.

"They'll kill all of us for this. Why did you do it?" She stared at Crosse, and anger washed away her fear. "You rebel!"

"Nancy," the professor said sharply, "Lance Crosse may not wear half a ton of gold braid, but he's a fine young man, and I'd rather not have him insulted by my daughter."

"Father! You're defending this—this person? Do you know the things he has done? Mr. Blake—I mean Tergon—was just telling me of the property the rebels have destroyed on Mars, the looting and killing and burning they're responsible for!"

"Shut up," Crosse interrupted roughly. "We have no time for such discussions. You'd better pack some clothes, too, Miss Oliphant."

"Sh—shut up?" Nancy repeated in a whisper, staring wide-eyed at the Martian. It was the first time in her life those two words had been addressed to her. "I won't shut up! Why should I pack my clothes?"

"Because you're going to Mars with us," Crosse told her. "You're too close to the professor. It would give the Stapo a bargaining power over him."

Nancy sought her father's eyes.

"Are you really going to Mars?"

"Perhaps even to Sirius, my dear," the professor replied whimsically. "Run along now and do as Crosse says."

She hesitated, unwilling to believe what had happened. "Hurry!" Crosse snapped. For a long moment she gazed at him as if he were some loathesome beast, then whirled and left the room. Her father followed her.

When they had gone, Crosse went to the unconscious Blake. Searching his pockets, he removed all weapons, tied the man's hands and gagged him. Then he pulled the inert figure over his shoulder and carried him up to the professor's little airship. It was a four-seater, with plenty of room in the back. Crosse dumped the Stapo chief there. Then he snapped on the ship's radio.

The Stapo headquarters raged over its official wave length. It had learned of the destruction of the patrol ship crew on the museum roof and the subsequent escape of the rebels. Professor Oliphant's part in the adventure was known, and even as Crosse listened, patrols were being ordered to the laboratory.

Crosse waited impatiently until the professor and his daughter came out of the elevator. The professor's arms were loaded with papers and books, hastily bound into parcels. He had forgotten to pack any clothing, but the girl had done it for him.

"Get in the back," Crosse told her. "You'd better handle the controls, professor. Stapo ships are on the way here, but we ought to be able to make it to my spaceship without trouble. They'll never expect us to go that way."

The professor sent the airship soaring to the five-thousand-foot level, where there was little traffic. Levelling off, he advanced the throttle of the atomic-powered auxiliary as much as he dared.

"Miss Oliphant," Crosse said stiffly over his shoulder. "Believe me, you will be much safer on Mars than you would be on earth."

"Save your worry, Mr. Crosse," she replied frigidly. "You may need it when Tergon is free. I'm going to Mars to keep my father company, not in obedience to your commands."

CROSSE did not reply. Snapping on the radio once more, he tuned to the Stapo wave length. Confusion leaped from the amplifier. Orders were being issued and countermanded as fast as they were given. Without the final authority of Blake's word, the secret police were helpless.

When they passed over the edge of the city, halfway en route to the brilliant central district, a squadron of patrol ships flashed past underneath, headed in the direction of the laboratory.

"They'll be disappointed," the professor murmured.

Traffic grew heavier, and the professor went up to the ten-thousand-foot level which

was reserved for high speed emergency flight. But even there, private airships were being flagged down at the traffic octangles, their power cut off and their occupants questioned.

A neutralizing ray was turned on the professor's ship, but he fled past, operating on his free power. Instantly another voice added itself to the din on the Stapo band. The guard was calling frantically to warn of the ship he could not neutralize.

Orders crystallized quickly as the message went through. Red blinking searchlights began to appear below, struggling upward to take the pursuit. Sirens curdled the night air. But the professor knew he could outrun anything the Stapo put in the air. The danger lay ahead, not behind, for there would be other patrol ships lying in wait for them.

Crosse picked up the phone of the ship's transmitter.

"Calling Stapo headquarters," he announced. "This is Lance Crosse speaking. I have Tergon One-Two aboard my ship. If you shoot me down, you'll finish him, too."

Pandemonium broke.

"A trick!" the ground officers screamed, be other patrol ships lying in wait for them. "Attack that airship anyway!" But the captains of the patrol ships hung back. None of them wanted the doubtful distinction of shooting down their own chief.

An abrupt silence blanketed the noisy radio. Then a terse announcement came on the air.

"Orders direct from Tergon One-One, our holy Diktör! Shoot down that airship!"

Like a hungry swarm of mosquitoes, the red searchlights rose in front of the fleeing ship, their commanders relieved of any further responsibility. Crosse glanced over his shoulder and saw that Blake had regained consciousness.

"See how your friends love you?" Crosse asked sourly. "They don't mind shooting you down. But we cannot risk Miss Oiphant's life."

"I'm surprised at such a tender sentiment, Mr. Crosse!" the girl said stiffly. "Murder seems to be your profession."

"You're mistaken," Crosse retorted. "Murder is Blake's profession. Mine is fighting."

A formidable pack of patrol ships had maneuvered directly on the course. Bolt discharges flashed blue lightning from their bow guns even though they were as yet far out of range. Beyond them lay the glowing heart of the city, the National Museum and, above it, the waiting spaceship.

"Calling Martian flagship!" Crosse barked into the transmitter. "Open your after cargo port. We're coming up."

"Lance Crosse!" the Stapo radio roared. "Land or be shot down."

Professor Oiphant continued his headlong flight. A bolt discharge exploded alongside, announcing that they were within range. The ship swirled in the disturbed air.

"Careful!" the professor shouted and sent his ship hurtling skyward in a mad climb over the Stapo ships.

"Stop him!" the Stapo radio blared. "He's getting away!"

The patrol ships climbed desperately, firing as they went, but they could not match the unlimited power the professor had built into his ship. At the twenty-five-thousand-foot level, the warship saw them and turned on its lights. Guided by this beacon, the professor slowed and began the difficult maneuver of entering the cargo port.

"Father!" Nancy called. "They're catching up with us. Hurry!"

The professor dared not accelerate. Grimly, he kept his eyes on the yawning port. A strong cross wind was blowing. It would be a difficult entrance under the best conditions.

"Are they near, Crosse?" he gasped.

The Martian nodded.

"Coming like blazes! If only this ship was armed!"

A bolt discharge exploded directly behind the little airship, shoving it dangerously near to a collision with the spaceship. The professor applied reverse power desperately to ward off the disaster, and they shot away. The Stapo ships, seeing they had separated their two enemies, circled triumphantly for a kill.

"Lance Crosse!" a strange voice boomed over the radio. "Stand by and we'll volley!"

CHAPTER IV

The Secret Weapon

CHAT'S my ship!" Crosse shouted. "Clear out, professor!"

Gladly, the professor yanked the plastic lever, and his airship screamed away. The bewildered Stapo ships circled aimlessly, unable to follow the swift flight. Impervious to the small-caliber bolt guns of the patrol

ships, the great spaceship's ugly turrets swung broadside.

A blinding flash of ray and bolt discharges whitened the pale night sky, and the tremendous roar of the guns reverberated across the arches of space like thunder. Not a single patrol ship survived that terrible volley.

"All clear, Professor Oliphant," Lance Cross said gravely. "You may board at your leisure."

The professor nosed his little ship gingerly toward the gaping cargo port and slipped through. Inside, the hold was glowing with soft cadmium lamps. The Martians were there, waiting for their leader. When he stepped out, a cheer went up, and Captain Druff ran to shake his hand.

"Glad to see you, Crosse," the captain said heartily. "You had us worried."

Crosse grinned briefly and jerked a thumb toward the rear compartment of the airship.

"Got a surprise for you in there, Druff. A fellow by the name of Blake—or should I say Tergon One-Two."

"You mean it?"

"Look for yourself."

Druff thrust his head and shoulders through the door of the rear compartment. His shout of laughter rang through the cargo compartment.

"Crosse, you're a wonder! How did you do it?"

Crosse shrugged and led the professor aside.

"We're on our way back to Mars with the things we came for," he told the old man. "Thanks for your help."

Then he glanced at Nancy Oliphant. Perhaps it was only the effect of the cadmium lamps, but at that moment she seemed beautiful beyond belief.

Her light hair glowed and her eyes—the spell was broken as Crosse realized that those eyes held nothing but distrust and hatred for him.

"We shall do our utmost to make you comfortable, Miss Oliphant," he offered politely.

"I want nothing from you," she told him stonily. "I shall never forgive you for placing my father in such danger."

A man might have died for speaking such words to Lance Crosse. He merely grinned.

Immediately after seeing Professor Oliphant and his daughter to their cabins, Crosse hurried to the control room. Captain Druff was already there, his eyes glued

on the array of vision screens that gave a view from every quarter of the spaceship. Blake, his bonds and gag replaced by handcuffs, was in a chair at the rear of the room, guarded by Zember and another rangy rebel.

"Any signs of pursuit yet, captain?" Crosse asked.

Druff nodded.

"They're sending up every blasted warship they have in First City. They can't travel any faster than we can in atmosphere, though, without burning up their hulls, and once we're in free space no one can catch us."

Crosse pursed his lips and studied the vision screens intently. "Change the course, Druff. Make it two hundred seventy-forty-five degrees. We'll pretend we're making for the asterite belt so long as they see us. The moment we get completely free of Earth's atmosphere, change over to two hundred thirty-five-fifteen."

"You won't get away with this, Crosse," Blake rumbled in his heavy, ominous voice. "We have ships on Earth with speed you've never dreamed of."

"I'm no scientist, Blake, but even I know how unimportant speed is in space warfare."

"They'll catch you," Blake insisted. "When they do, I personally will supervise the torture."

Crosse strode over to the chief of the dreaded Stapo. Blake still bore the marks of their recent battle.

"Citizen Blake," Crosse growled. "The age of torture is over. You and your Diktors will soon be wiped off the earth. But we are still so near the end of the age of torture that I might easily practise it upon your person—with my fists."

"Think you can frighten me?" Blake sneered. "Your revolution will never succeed. The government of the Diktor is too strong, and the appointed governor on Mars is too capable a man."

"The Diktor is old and senile," Crosse retorted. "His government is awash with corruption. We rebels will succeed—do not fear."

Blake's eyes narrowed.

"Tergon One-One may die a sudden death," he said slowly, his eyes growing sharp with cunning. "Then I, Tergon One-Two, will be the only man strong enough to seize control of the government. The planets of Earth and Mars would know the strength of sure and powerful hands once more."

"So that's your game, Blake? Murder

the Diktor and make yourself the Tenth Diktor? However, you will spend the rest of your life in imprisonment on Mars."

"You won't dare hold me," Blake taunted, his lip curling. "You fear the Stapo too much."

Lance Crosse's hot temper flared up instantly.

"I said that we Martians do not torture, but I didn't guarantee to control myself. I would like nothing better than to forget my own principles."

BLAKE slumped back into his chair, growling under his breath. Still fuming, Crosse returned to the vision screen.

"We've lost the pursuit," Captain Druff told him. "We still have to pass the Space Patrol, but they'll never see us on this course."

Professor Oliphant entered the control room at that moment, looking fresh and neat in a change of clothing.

"About that diary of Tragg's," he suggested.

"I put it in the safe in Zember's study," Druff said.

Crosse led the way to a small book-lined cabin. Opening the safe's magnetic tumbler lock, he produced the heavy, leather-bound volume he had stolen from the National Museum. It was written partly in duro-type and partly in Tragg's all but illegible scrawl.

"What were the directions?" the professor asked.

"According to Tragg's acrostic, we're supposed to hold the diary over a flame and look for marked words. I guess Tragg used invisible ink of some sort."

"Heat of any sort should do the trick," the professor muttered, producing his pipe lighter and snapping it on. He paused. "If there are no marked words in this diary, Crosse, I'll be a disappointed man."

Crosse's lips tightened.

"It will mean the end of the Martian revolution. Without that treasure, we're sunk."

The professor opened the diary and began waving the lighter carefully under the first page. Miraculously, dozens of little black check marks appeared. The professor pulled out a large handkerchief and blew his nose as if to indicate his relief.

"Take it down, Crosse," he ordered briskly. "We're on our way to Sirius."

"T-h-i-s-v-o-l-u-m-e-i-s-d-e-d-i-c-a-t-e-d-t-o-t-h," he read.

The professor paused.

"Can you break that up into sense?" Crosse frowned, pencil poised over his pad. Then he made a few quick lines, dividing the words.

"This volume is dedicated to th—" he read.

"Excellent!" the professor cried. Hurriedly, he dictated the remaining letters marked on the first page. When he had finished, Crosse laid aside his pencil and read aloud.

"This volume is dedicated to the man who solves its secret. To all common intent it is my diary, but actually it is of far greater value than an account of my life. It is here, in this collection of notes, that I reveal the secret of life flow, that I describe my journey to the Sirius system, and that I give an inventory of my fabulous treasure and an account of its—"

"Simple enough," the professor pronounced. "All we have to do is jot down each letter Tragg has checked. My apologies to you, Mr. Crosse, for having called you a liar. I shall be glad to know how Tragg engineered his flight to Sirius!"

"Since we're going to be several weeks on the way to Mars," said Crosse, "I suggest we get some sleep."

"Sleep? Not now, Crosse. I'll transcribe a few more pages—just to see if any mention is made of that secret weapon."

Crosse made his customary rounds of the ship. Close to four hours later, he passed by Zember's little cabin and saw the light was still glowing within. Through the half-opened door, he saw Professor Oliphant working busily over the diary.

"Hadn't you better get some sleep, sir?" he asked with some concern.

"Sit down, Crosse. Have something to tell you!"

Crosse took a chair.

"Shoot!" he agreed.

The professor shoved his glasses down to the tip of his nose.

"I think I've found what we wanted," he said simply.

"The secret weapon?" Crosse cried.

"Well—no," the professor hesitated, glancing at the foolscap on which he had been jotting his notes. "But listen to this—

"Yesterday, from my observatory on airless Deimos, I made a discovery that might prove valuable. Employing the new spectroscope built according to my design by Haeckel Bros., Omaha, I have photographed Sirius.

"To my astonishment, I discovered a foreign pair of lines in the range below

Gamma four thousand. Can this be a new element? This morning I inspected the sun and Alpha Centauri, but found no comparable lines. Since lunch I have been smoking my pipe, pondering over the problem of life flow.

"If this new vital force, as I think it will, lends itself to interstellar travel, I shall certainly choose Sirius as my first point of destination."

"A new element?" Crosse said slowly, knitting his brows. "Wouldn't that spoil a lot of scientific theories?"

"Theories are made to be spoiled," the professor murmured as he thumbed through his notes. "Listen to this now. Tragg has arrived on Sirius—one of the planets, of course—and he is about to return to Mars—

"The quantities of crude ion-element are baled and stored with the rest of my treasure. It occurred to me, as I made my ship ready for the return, that ion-element would not exist in an environment where carbon also exists.

"There is no carbon on this planet (I have been eating from the provisions brought with me), and consequently the unstable ion-element has been formed in abundance. I asked myself the question—what would happen if ion-element were placed in contact with carbon?

"A hurried experiment revealed dynamic results. I delayed my departure long enough to try ion-element against common CO₂ and found the results tremendously enhanced. It was a short step thence to the other experiments.

"But I was so appalled with the machine I had created that I certainly will not take it back to Sol with me. If any of Earth's diktor's should lay their hands on such a weapon. . . ."

Crosse slapped his thigh.

"I knew it!" he cried excitedly. "What do you suppose the weapon is?"

"Don't know," the professor yawned. "Think I'll take your advice, Crosse. All right if I bunk here?"

"Certainly. I have a cabin for you beside your daughter's." He glanced thoughtfully at the professor. "You know, sir, I didn't want to drag her into this, but I simply could not leave her on Earth. She's a lovely girl."

"Lovely, but a nuisance," the professor amended. "I never will forgive her for setting fire to my laboratory when she was six years old. Then there was the time she had the measles and I wasn't allowed to attend the Science Forum."

CROSSE nodded, silently mulling over what the professor had said.

"Lovely nuisance!" he muttered, then laughed.

He returned to the control room. Blake was still there, but since the Space Patrol now lay far behind, Crosse ordered him confined. Then he and Druff supervised putting the spaceship into shape for the long flight ahead. It would be two and a half weeks before they would reach their destination.

During the voyage, Professor Oliphant spent much of his time putting his notes in order.

A more tedious job was that of deciphering the diary. Each page had to be heated carefully.

Mars was looming large and ruddy in the bow vision screen when Lance Crosse, stopping by Zember's book-lined cabin in search of the professor, found his daughter working busily over the extremely important diary.

"For shame, Miss Oliphant," he chided gently. "Do you realize you are abetting the Martian revolution? Your friend Blake would be forced to condemn you to a painful and lingering death."

"Tergon One-Two is aware of my loyalty, Mr. Crosse," she said icily.

"Tergon One-Two!" Crosse replied contemptuously. "Whenever I want to make myself angry, all I have to think of is those symbols and numbers the Ninth Diktor tacked on you terrestrials. They're the basis for the cruellest caste system Earth has ever known."

"Being a Martian barbarian, you wouldn't understand," she said. "Mr. Bla-Tergon told me that symbols and numbers brought efficiency into the classification of citizens."

"Did he, though!" Crosse growled sarcastically. "What is your symbol—Lala? Lina?"

"Lila," the girl replied coolly. "I am Lila One-Four Hundred Seventy-One a Three. I wish you would address me in that way if you have occasion to address me at all."

"I'll call you what I darned well please," Lance Crosse said roughly.

"You're a Lila, are you? That means you are an unmarried young woman of some beauty, weight between one hundred ten and one hundred twenty, light brown hair and blue eyes."

"The number one means you are a citizen of First City, and the other numbers identify you among all the other Lila types in that

district. It's a wonder you didn't let them give you a number to describe the condition of your teeth and the position of your vaccination! Do you actually call yourself Free?"

"I don't know that I care to be free," the girl replied gravely. "Would I give up the security offered by the Diktor's government for the freedom to starve or die uncared for?"

"Security!" Crosse groaned. "You have security only if you live like a beast, controlled, herded, milked, bred by the whim of a rotten officialdom."

"Please, Mr. Crosse," she cried angrily. "You needn't shout at me as if I were one of your native women!"

Crosse stopped abruptly, his mouth open.

"Native women!" he shouted. "My stars, what an opinion you must have of us Martians! You forget we were all descendants of the hardy space pioneers who first landed on Mars and colonized the planet. You have much to learn, Miss Olyphant."

She dropped her eyes to the diary over which she was working, a faint flush on her features. Crosse paused at the door.

"Thanks for helping with that diary," he said.

"Not at all," she replied primly. "I was doing it to help my father."

That was the only opportunity Lance Crosse had to speak to her alone during the voyage to Mars, and it did little to reduce her animosity toward him.

The spaceship was nearing Mars, and they picked up a storm of radioed messages from Earth to the capital city of Mars, Xanadu, ordering the governor to make sure Lance Crosse did not reach that planet alive.

The Ninth Diktor himself sent word that the valuable position of Chief Tax Collector on Earth awaited the governor if he captured or killed Lance Crosse—disgrace and death if the rebel ship got through.

Neither Captain Druff nor Crosse were worried about the landing. Mars was their home and they knew it well. Moreover, the rebel fleet was there, capable of blasting a hole through the ring of Earth ships and seeing them safely in.

CHAPTER V

Progress on Mars

XANADU itself, the great sprawling commercial capital of Mars, lay in the

center of the fertile steppe region where the Oder and Delon rivers joined to form the Greater Delon. West of Xanadu, the steppes rose gradually toward the Brozzian mountains.

The stronghold of the rebels lay deep among the Brozzians, buried in granite caverns. The factories and shops were there, turning out warships as fast as they could be built. Women and children labored in munition shops willingly for their own freedom.

Communications in code with the rebel fleet gave Crosse the benefit of their scouting observations. The position of each of the governor's warships was known and plotted on a chart. Professor Olyphant pointed out that the Earth ships were bunched on the side facing Earth.

He advised Crosse to radio his own men to stage a feint attack at that point as if to open a hole for the flagship. The governor would immediately order all his ships to bolster the defenses there, and Crosse could circle the planet and come in from the opposite hemisphere.

The plan worked perfectly, and Crosse made his landfall over the desert of Thara with only a single squadron to see him safely through. Before the nervous governor realized what had happened, the spaceship was in its hangar at the Brozzian stronghold.

The rebel commanders of the fortress welcomed their leader enthusiastically. A council was called immediately. All of the general staff not on actual combat duty attended.

They met in a severely plain room. Crosse and his officers wore no uniform but the jumper suit universally worn by Martian colonists. As he seated himself Professor Olyphant recalled that a similar convention of the Ninth Diktor's generals would have been a gaudy display of gold braid.

"Fellow rebels," Crosse began, "our mission to Earth has been a success. We have brought back with us both Tragg's diary and Pericles Olyphant. In the bargain, we have a valuable hostage in the person of Blake, head of the secret police.

"We have been warned that lack of materials and financial resources would doom our fight for freedom. But if we can retrieve Tragg's treasure from Sirius, we shall have precious catalysts needed to change our steel supply into metals durable enough for war machines.

"We cannot win without Tragg's treasure, but I guarantee that we will have it. I might add that we will fall heir to all the designs and inventions of Edward Tragg, possibly the most valuable part of the treasure, for Tragg was the greatest of all scientists—"

Here the professor interrupted with a deprecatory cough. Crosse paused and winked solemnly at the assemblage. "—up to the time of Pericles Lore."

The professor looked pleased, and Crosse continued.

"For the past months, since Zember brought us those documents that inspired our search we have had only one end in view—to secure that treasure for our own purposes.

"Without it we cannot hope to keep the people of Mars behind us. Dread of the Stapo is stamped too deeply into their blood for them to fight in a hopeless cause."

Lance Crosse's eyes glowed as he spoke of the hardships and dangers confronting their cause, and warned them not to belittle the obstacles, but to glance ahead and see the shining victory waiting.

"I tell you we must devote all our energies to the task of finding Tragg's treasure. The people of Mars must know we lead them wisely. Give Professor Olyphant your wholehearted cooperation. Henceforth he is to be complete master of our laboratories."

That little man rose beside Crosse, scratching at the back of his neck.

"I've learned much since I met Lance Crosse," he said quietly. "I learned that a life in a laboratory is a life wasted unless the ultimate end of such work is to the good of mankind.

"No achievements of mine could have benefited my fellowmen under such a rule as that of the Ninth Diktor. Therefore, I suggest," he paused and stared amiably about—"that Zember assemble his engineers now, and we all get to work."

A cheer rose from the assembled warriors. Crosse dismissed the council hurriedly and went off with some of his officers, including Zember, to clear a hangar for the construction of the new ship. Captain Druff and a few others remained behind with the professor. Druff cast a worried glance at the professor.

"Do you want to tell me something, Druff?" the professor asked.

"Well, sir," Druff began hesitantly. "It's Zember. He's been with us only half a year and his record before that was none too

good. Some say his father was a native Martian—one of the last of that race of true Martians. They had no sort of character or will power to speak of."

"Do you want me to keep an eye on Zember?" the professor interrupted shrewdly.

"Right!" Druff grinned. "Zember has some sort of influence over Crosse. We're all for Crosse, but we don't like Zember."

The professor agreed to keep his eyes open, but Druff's words set his mind to work. Surely Crosse would never allow a man of inferior quality to gain so high a position in the rebel forces if he were not sure of him!

Lance Crosse, meanwhile, got the work started in the clearing of the hangar. Zember went to get his drafting instruments, while the rebel chief returned to get Professor Olyphant. His path lay through the dim, hewn corridors from which opened the social rooms and living quarters of the rebels.

Blake, the Stapo chief, had been confined in one of those rooms for lack of a cell. He was shackled to the wall, and entrance to the room was forbidden to all but a specially nominated jailer. But, as Crosse hurried past, he heard the sound of voices within the room. Surprised, he stopped and listened. Someone was talking to Blake.

STRAINING his ears, Crosse tried to identify the voice, but he could not. Then Blake's rumbling bass came clearly.

"But I offer you complete amnesty and more wealth than most Martians see in a lifetime! I warn you, do not refuse what I ask!"

The other replied briefly in words that Crosse could not hear. Then the door to the room swung open. Crosse just had time to flatten himself against the rough wall to avoid being seen by the man who came out. It was Peter Zember.

Crosse waited until Zember was out of sight before he resumed his walk in search of Professor Olyphant. He found the old man still with Druff and took him back to the hangar. Zember had returned and was directing the workmen. Overhead cranes were bringing materials from the ware-rooms and depositing them in convenient depots. The professor glanced at the busy scene and then inspected the little office set aside for his use.

"Crosse," he said. "I'd like to have a talk with you before we start work. Is Zember

to work with me?"

"Of course," Crosse replied quickly, not meeting the professor's eyes.

"How much do you trust Zember?" the professor asked candidly.

Crosse met the older man's eyes fully.

"I trust him—as much as I trust any man," he replied quietly.

"Good! Call him in while I read a lecture to the two of you."

When Zember entered the cubicle with Crosse, the professor was packing his stubby pipe.

"During the last days of the flight from Earth," he began, "after the transcription of the diary was completed, I went over Tragg's notes and compared them with my own. I am now fully convinced that he actually made the trip to Sirius and returned. Tragg not only discovered basic energy, but he put it to work."

"This basic energy you speak of," Crosse interrupted. "Precisely what is it?"

"I'm glad you asked that, Crosse," said the professor. "I was just about to explain it anyway. Basic energy may well put an end to all scientific investigation, for the simple reason that it is the end."

"I discovered it in the way many planets have been discovered—because of the mathematical necessity for its existence. Life, I told myself, is basically conflict—forces working against one another, creating frictions, heat, motion, power, light—and life."

"What are the forces concerned?" Zember asked.

"When you strike an archaic match, the match head is in conflict with the abrasive. The material of the match itself is unstable. Yet it might as well be made of lead if no abrasive were to provide the necessary friction."

"There are in existence a bewildering number of millions of 'matches' that constantly strike the flame of existence. Let us say that I, because I am alive, am a 'match.' On what am I being struck to produce this life?"

"Of what am I composed? Atoms. Atoms, in turn, consist of protons and electrons. And what are protons and electrons? Energy, gentlemen! There's our clue. Nothing exists but energy! Now we have dealt with the material of the 'match.'

"What of the abrasive on which the match must be struck? If there were nothing beyond the electron and the proton, those two basic units would be lifeless. Space exists between the integral parts of the atom in an

unexplained way. That space, I believe, is filled with the greatest, most fundamental life force—basic energy."

"Basic energy is inert energy. It is an endless sea of force too stupendously powerful to be comprehended by the intellect of man. But basic energy is the abrasive material that acts upon the atom to give it its life."

"Excuse me, professor," Crosse said impatiently. "I warned you that I was no scientific wizard. It's Tragg's treasure I want. Tell us how this basic energy will help us get it!"

PROFESSOR OLIPHANT smiled as he relit his pipe.

"That's a question your grandfather asked himself. Where can I bury my treasure so no meddling fool will ever find it? Another star would be best, but how to get there? He had just discovered basic energy, and it occurred to him that if he could only harness its incalculable flow, he could cross outer space to any star system he selected."

"Tragg's problem in his original flight to Sirius, was to create some sort of alliance between the spaceship and that river of basic energy. He found it by overcharging the outer hull of his ship with as intense a potential of energy as he could build with his atomic generators."

"This broke down the atomic structure and reduced it to inertia—a kind of atomic ash—which then was washed along on whatever flow of basic energy happened to be passing along at the moment the power screen was sealed about the ship."

"How did he know he was headed for Sirius?" Zember interrupted. "Suppose his ship was carried by another flow to some other star?"

"A pertinent question, Mr. Zember, and a difficult one to solve. Tragg's genius enabled him to construct a coupling instrument that would select the proper impulse of basic energy. You see, the flow of basic energy through Mars at this moment is in all possible three-dimensional directions."

"Obviously, the coupler anticipated the flow, because basic energy travels at such an incredible rate that if the coupler threw in the power screen as the correct pulsation was passing by, the mere mechanics of the operation would seal the ship's screen after the flow had gone by and another had taken its place."

Lance Crosse, who had been listening with mixed admiration, incredulity and impatience, leaped to his feet.

"What you're telling us is amazing, but Zember and I still want to know—can you build us a ship that will make the trip to Sirius?"

"Yes, Crosse," the professor replied promptly. "As a matter of fact, I can do better than that. Give me a standard spaceship, and I'll adapt it for the job."

Crosse's face lit up.

"Perfect! That means precious days will be saved. How soon will it be ready?"

"We'll give you action, Crosse, but you've got to give us time. Shall we go to work, Zember?"

The lanky Martian rose quickly, starting for the door. He had not taken two steps, however, before he staggered and fell. Crosse leaped to his side and lifted him into a chair.

"What's the matter?" Professor Oliphant cried, alarmed at the sudden collapse.

"He gets these spells. I thought he was over them for good. This is the first in six months. Don't let anyone in. No one must know of this."

"I'm afraid I don't understand," the professor said.

"Never mind," Crosse muttered. "It's a strange affliction, but the others wouldn't understand. They don't like Zember."

CHAPTER VI

Treason!

PROFESSOR OLIPHANT knelt beside Crosse. The young man was rubbing Zember's wrists and temples. Several minutes passed before the man opened his eyes. The professor almost cried out in alarm, for the eyes were not those of the man who had just been with them. They were paler, tinged with yellow. Half-lowered lids gave them a strange oblique, crafty appearance.

Zember muttered something under his breath and struggled to his feet.

"Feel all right, Peter?" Crosse asked anxiously. Professor Oliphant noted a touch of despair in the young man's voice.

Zember stared at his leader vacantly, as if he had never seen him before. But the voice that issued from his lips was still Zember's voice.

"Must have tripped on something. Sorry, Lance." He swayed a moment, then lunged out of the office.

"Professor Oliphant," said Crosse, "I know you would like to ask questions about Zember, but I can't answer them for you. Believe me, when I say that the situation is best kept private between Zember and myself."

"My job is to get you to Sirius, not to ask questions," the professor replied calmly. "Do you trust Zember?"

"As much as I trust any living man," Crosse repeated.

"Good enough. Let's get to work."

They left the office together. The hangar outside was busy with men and machines, but the work was still in the preparatory stages. Some of the workmen were standing idle.

"Where's Zember?" Crosse asked one of them. The workman shrugged.

"He came out of the office a few minutes ago and went on across the hangar."

Crosse bit his lip.

"Professor Oliphant," he said hastily, "have these men bring out warship JJ-Three. It'll be best for your purposes. I'll be back shortly."

Crosse left the hangar at a swift stride. He hurried through the testing laboratories and bolt gun arsenals, across a slim causeway that hung between two jagged mountains and plunged into the maze of living quarters.

From the main corridor, others branched off, and Crosse took the first of these. He found himself facing the block of rooms where Blake was kept. The door to Blake's room stood ajar.

Yanking the door wide, he saw the room was empty. With a savage curse, he entered. The shackles that had confined Blake hung empty from the wall. The bed was neatly made, but a chair lay on its side.

The single word "escaped!" exploded from his lips. Then he turned to give the alarm from the wall transmitter, but a sudden roar of pain and blackness descended upon his head. Blinded by the crushing blow, he staggered and fell to his knees.

A lesser man than he might have been felled, but it was no weakling the Martian people had chosen as their leader. His brain reeling and throbbing, he forced himself to his feet just in time to see Blake step out from behind the door, a shattered chair in his hands.

"The traitor does not like the strong hand of the Stapo!" Blake sneered.

Dimly, through the bloody haze that clouded his vision, Crosse saw the burly

Stapo man come at him. Behind the Earthman, he saw the pale oval of Nancy Olyphant's face, her eyes wide with horror, her lips parted.

"This will teach you to utter treacherous speeches and to incite rebellion against the Diktor!" Blake hissed.

He struck Crosse a crushing blow on the side of the head.

Crosse reeled back, grasping at the table for support, in no condition to defend himself.

Blake came at him again.

Faintly Crosse heard the girl scream, but Blake struck him full in the face with a heavy right fist, and the rebel leader knew no more.

A dawn of pain and gray light brought him consciousness once again. Stifling a groan, he pushed himself up from the floor and leaned against the wall, holding his battered head in both hands. Discordant noises thundered through his brain.

A thin, high wail persisted even after the other noises subsided. Vaguely he recognized it as the alarm siren. Breathing deeply, he forced himself out of the room and into the corridor. Beyond, in the main corridor, many Martians were running past. An amplifier was droning a repetitious message.

"The prisoner Blake has escaped in a fast airship. Two guards have been killed and one seriously wounded. Our warships at the front have been notified. Pursuit is in progress, but it is feared that Blake will be able to reach Xanadu. Blake was in the air fully ten minutes before the injured guard could sound the alarm."

The announcement drove the confusion from Crosse's brain. With a shake of his head, he joined the thronging rebels, made his way toward the observation balconies. Ascending in a private elevator to the top-most of the balconies, he found Captain Druff and his other officers.

"Crosse!" Druff shouted. "Where have you been? Blake has escaped!"

"I know that!" Crosse snapped. "He almost did for me before he left."

"You were there? Who let him out of his irons?"

Crosse hesitated, and Druff's face darkened.

"Zember!" he cried. "Zember did it!"

A growl rose from the other officers, but at that moment Professor Olyphant's voice was heard from the elevators.

"Where is Lance Crosse?"

"Here, professor," the young man called.

THE old man appeared on the balcony dragging his daughter behind him. Nancy's face was scarlet with rage as she fought to free herself. Crosse noted an ugly bruise on her left cheek.

"She let Blake go!" the professor shouted, beside himself with indignation. "My own daughter! She came to me just now, whimpering that she had done something dreadful. A moment later the announcement of Blake's escape came through. To think that I sired this—this"

"Father, I didn't—" the girl cried. Tears streamed down her cheeks. "I had nothing to do with it. I went to his room and he was already free!"

"Likely story!" the professor snorted. "When will you learn that this is not a game of hide-and-seek, but war! People will die and suffer torture for what you've done today!"

"Father, believe me!" the girl sobbed. "Ask Mr. Crosse—he was there!"

She turned imploringly to Lance Crosse, but the words died on her lips. He was staring at her coldly, offering no sympathy.

"Yes, I was there," he admitted grimly, fingering his jaw. "I saw you with Blake!"

The girl shrank from him. Then she glanced about at the harsh accusing faces of the Martian fighting men. The tears stopped flowing, and she straightened up defiantly.

"Very well!" she cried, her voice trembling. "Believe whatever you like! I have done my last act of kindness for your blessed revolution."

One of the rebels ground his teeth, muttering words that sounded strangely as if they ended with "death!"

"Put that woman under arrest," Crosse ordered quietly. "But do not harm her. Anyone who hurts her must answer to me."

"Don't be so blamed noble, Crosse!" the professor snapped. "Throw her in a dungeon—a damp, nasty one. Feed her bread and water."

These ridiculous words dissolved the tension. Captain Druff laughed shortly and spanked his thigh. Blake was gone, and there was no use crying over spilt milk.

"Lance Crosse!" the amplifiers blared. "Blake has reached Xanadu. He wants to send you a message. Shall I put him on this speaker system?"

Crosse lifted a wall transmitter from its hook and barked an order in the affirmative. Moments later, Blake's familiar voice emerged from the amplifier.

"Lance Crosse! I have taken personal command of the Martian Colonial government. All revolution on this planet will be stamped out ruthlessly and completely."

"If you surrender now, your people will be permitted to resume their normal lives. You and your leaders, of course, will be executed. If you insist on fighting, every man, woman and child will be condemned to death."

"For the good of Mars, I call upon you to give up your struggle and stop this flow of precious blood. Powerful warships from Earth are already on their way to reinforce the Colonial Fleet. Once they have arrived, this offer of amnesty will be revoked. Your fate will be sealed."

No sooner had the radio gone dead than Captain Druff whirled and shook his fist toward the eastern horizon, beyond which lay Xanadu.

"Fine words, Blake!" he shouted derisively. "But it takes more than words to scare us, and we don't like the smell of your proposals."

Crosse did not join in the confident roar of laughter that followed these words.

"Don't underestimate Blake," he warned. "He's a powerful enemy."

"But, Crosse," one officer cried. "It will be three weeks before those reinforcements can arrive!"

"And in that time," Professor Oliphant cried, "we can go to Sirius and return. I'll have the ship ready in a fortnight."

"A fortnight?" Crosse asked. "But that will only leave one more week. How long will it take to reach Sirius?"

"It took Tragg six hours," was the professor's amazing reply.

Even Captain Druff, who would not have known basic energy from rocket ash, goggled at that. Crosse forgot about his battered head.

"In that case," he grinned, "Blake is out of luck. We'll have the treasure back on Mars before his reinforcements arrive."

IN the days that followed Blake's escape, the government radio at Xanadu poured out a continuous stream of threats against the rebels. Blake took command of the fleet and threw it recklessly against the rebels in an effort to break through before the arrival of reinforcements.

But Lance Crosse and Captain Druff allowed an occasional spearhead to enter, then stiffened and pulverized the attack. The steppe between Xanadu and the Brozzians

was littered with the wreckage of warships.

Professor Oliphant and Zember worked day and night in the hangar underneath the rebel camp. Although he was absorbed in his work, the professor sensed a change in Zember. The man was rabidly curious to know the secret of Tragg's coupler, scarcely left the professor's side lest the work should be finished without his knowing it.

When the JJ-3 was nearly completed, the professor rejected it as unsatisfactory. It had been equipped with the sort of apparatus Edward Tragg had used on his flight to Sirius, yet the professor declared it unsafe.

"Tragg charged the outer hull of his ship with energy," he explained to Crosse. "It was the obvious course to take, yet the chances were one in one hundred that the hull would be destroyed before it could be annealed to the flow of basic energy. We don't dare take that chance."

"Rot!" Crosse retorted angrily. "We can't take any chances! That ship must be ready to leave within the week!"

But the professor insisted obstinately on having his own way, and, rather than risk further delay, Crosse allowed him to take over the flagship they had used in the trip from Earth and convert it with the new equipment. He was well aware of the professor's unreasonable jealousy of Edward Tragg's fame, and he suspected this of having much to do with the change in plans.

However, the professor repaid Crosse by redoubling his efforts. He did most of the work on the new coupler himself and ordered Zember to supervise the changes in the control room of the flagship. Within fifteen days of Blake's escape, the work was completed.

"My power flow from the atomic generators is adapted to flow into the air surrounding the ship and create the shield externally. Then, if that one-hundred-to-one slip-up occurs, the air will suffer and not the ship," the professor explained proudly. "This means we'll have to start within the atmosphere of Mars, but it guarantees our safety."

The rebel workmen were loading supplies into the flagship and stocking the ammunition bays when Captain Druff raced into the subterranean airport in a little fighter airship.

"Crosse!" he roared. "Blake is attacking in force! A strong squadron of heavy warships has already arrived from Earth. They must be something new to have such speed! Blake is throwing them against our fleet, and sooner or later he'll break through!"

Crosse turned to the professor.

"Hear that? How soon can we leave?"

"Now, if you say so," the little man replied.

"Now it is!" Crosse strode to a wall transmitter and ordered the radio coordinator to put him on the air to all Mars.

"Men and women of Mars!" he said. "The hour has come! Tergon is throwing his full strength against us. But do not lose heart. Remember that you are a free people. Rise up, Martians! Rise up, everywhere on this beloved planet and strike at those who call themselves your masters."

"We in the Brozzian camp will fight as men never before fought, but we need your assistance. Wherever you are, Martians, strike now! One thing I promise you—victory will be ours!"

Crosse snapped off the transmitter.

"Blake will have his hands full now," he said grimly. "There'll be revolution in Xanadu itself, and he won't dare weaken his garrisons to strike too heavily against this camp. I leave you in charge, Druff. Professor Oliphant and I will go alone. You'll need every man."

He gripped the young captain fiercely by the shoulder.

"Don't surrender, Druff! Hold out until we return!"

"Don't worry." Druff's face was white but he was unafraid. "I'll hold this base until Mars itself blows apart!"

"Coming, professor?" Crosse said.

The old man was already climbing nimbly into the flagship, and Crosse followed. Almost through the port, he was hailed from the far side of the hangar. Two guards ran toward the ship, bringing with them Nancy Oliphant.

"She demands to be taken with you, sir!" one of the guards cried.

"Take her back!" Crosse ordered. "We have no place for a woman."

Nancy Oliphant slipped away from her guards and ran past Crosse before he could stop her. He started to follow her, but stopped and made a despairing gesture with his hands.

Waving a terse farewell to Druff, he swung the heavy port closed and listened for the heavy sigh of the pneumatic seals.

Hurrying to the instrument room, Crosse found the professor working busily over the coupler.

"We're going up, professor," Crosse said, taking his seat. Jamming home the lever that controlled the pre-heaters, he waited for the flaming hydrogen to rush through the

rocket tubes. Then he touched the throttle, and the liquid fuel blast surged after the hydrogen.

The crackling of improper combustion could be heard even in the control room, but as Crosse nosed the ship out of its berth and into a sharp-crotched valley, the noise diminished. The flagship's nose lifted, and it shot skyward as full power leaped through its tubes.

The radio receptor signal crackled, and Crosse snapped on the cabin amplifier.

"Be careful, Crosse!" It was Druff's voice. "Blake has broken through our fleet with several heavy ships, and he's making for the camp. We'll have them blasted down before they can do any damage, but don't let them catch you."

Crosse acknowledged receipt of the message and snapped off the radio. Scanning his vision screens anxiously, he spotted three large Earth warships hurtling over the first foothills of the Brozzians with a swarm of rebel craft in pursuit.

"Nearly ready, professor?" he asked over his shoulder.

"Give me another minute, Crosse," the professor begged. "I want to make sure of the synchronization of this coupler. Our generators are already turning over and the power reserve is complete."

CHAPTER VII

Sirius Business

CROSSE returned his attention to the three Earth ships which were now almost directly below him. A savage volley of bolt discharge greeted the squadron, and one of them exploded in full flight. The other two, realizing how foolhardy their mission was, soared away from the bristling camp. Spotting the lone flagship, they made for it, evidently deciding to make one kill before they ran the gauntlet back to their own lines.

Eyes narrowed, Crosse watched them rise. Their forward turrets were out and ready for action, ugly with the snouts of bolt guns.

"Ready, professor?" he asked tensely?

"Another second," the professor replied.

The Earth ships were evidently part of the reinforcement fleet that had just arrived from Earth, for they climbed at an unbelievable rate without seeming to burn their hulls.

Long range guns opened up and bolts began to burst close about the Martian flagship. Another moment would put them within volley range. Crosse tightened his grasp on the controls, preparing to maneuver if necessary.

A blinding white flash from behind brought a startled cry to his lips and he whirled in his seat. The professor was just rising from his work over the coupler. A single tiny light set on its top flashed on and off with rhythmic regularity. The professor glanced at Crosse and smiled wearily.

"We're on our way."

Crosse glanced at his vision screens. The Earth ships had disappeared. Mars itself was gone, for the screens were no longer functioning. Their plates were a neutral gray.

A long sigh escaped Crosse's lips as he relaxed his entire body. Locking the now-useless controls, he stepped from the pilot's seat.

"Professor Oliphant—" he began.

The little, bearded man, had slumped back to the floor, half sprawled over his beloved coupler, dead asleep. Crosse grinned. The strain and tension of the past weeks were gone suddenly, leaving him with a strange empty feeling.

He wondered if all adventurers were as casual as the professor. Had they all gone to sleep—those earliest pioneers of space flight? If they were human beings, if they had worked as the professor, they probably did!

Crosse shook his head as he sank into a chair, trying to realize that the ship was a tiny capsule, isolated from the familiar galaxies of stars and planets, rushing madly through outer space in the flow of an unknown force.

He felt his head nod and his eyelids close. It was dark and peaceful in the control room. Vaguely, he was aware that Nancy Oliphant was there, pulling her father into a more comfortable position.

A soft-toned siren moaned through the flagship when six hours of flight were over, and the automatic coupler released its grip on the flow of basic energy. Crosse blinked and sat erect in his chair. Yawning and stretching, he glanced about.

The professor was still asleep, a resistance-warmed blanket tucked in about his frail body. Nancy Oliphant stood by the instrument board, staring fascinatedly at the vision screens. Her lips were slightly parted, and the faint reflected glow from the soft lights touched her features softly.

"What is it?" Crosse asked.

She beckoned him to come and see for himself. In the bow screen, was envisioned a sight no mortal man, with the sole exception of Edward Tragg, had ever before seen. The great star system of the binary blue giant Sirius lay sprawled before them. Dominating the picture was the massive major sun, a ball of blue flame, thrusting its hungry tongues far beyond its own chromosphere. Set against the pearly jet blackness of airless space, it presented so immense an aspect that Crosse almost felt he could comprehend its size and in doing so was himself reduced to hopeless insignificance.

Beyond the blue giant, lay another sun, much smaller. But Crosse bent close to the vision screen and examined it carefully. No, the smaller sun was nearer than the large one, but optical illusion had placed it farther away at first glance. It was a small, dense white body, swinging sturdily around the common center of gravity it made with its giant blue companion.

MORE marvelous than either sun were the far-flung, interlaced planet systems of both. In sweeping circles, the satellites ringed the suns. Crosse counted seven for the small sun and fifteen for the large one, wreathed like necklaces in inky space.

In addition, two circles of geologic dust and fragmentation banded each sun, intersecting at the point nearest both, evidence in ages past of a collision between a planet of one system and a planet of the other. The debris of the titanic collision still drifted in the old orbit, giving the effect of Saturn's rings, and the circles still intersected like two vast celestial cogs.

"It's wonderful!" the girl breathed raptly. "And yet—do you think it heresy to say that it seems quite simple? Beautifully simple!"

Crosse shook his head.

"It's not heresy. Your father has said, and I agree with him, that the great fundamental truths of life are simple. It is only in the petty ramifications of those truths that our complicated problems arise."

"What's this? Quoting me?" The professor shambled up behind them and bent to peer at the vision screens.

"Sirius!" he muttered. It was his only comment. Crosse seated himself in the pilot's chair and charged the main blast tubes with hydrogen. Moments later, the great flagship had swung over on her course.

Although they had traveled the vast distance from Mars in six hours, the compara-

tively short distance yet remained would take two days under the dogged propulsion of liquid fuel rocket power. They had already learned from Tragg's diary that their destination was the fourth planet of Sirius' small binary companion.

"Conditions there are much like those on Earth in the early stages of its development," the professor said. "Tragg describes the planet fully."

"How about the treasure?" Crosse asked.

"It's on high ground. Tragg says there is only one range of mountains on the entire sphere. He marked the particular peak under which he cached his treasure with a small reflecting disc. He says that any ship cruising over this high land will catch a reflection from this disc without difficulty."

Crosse chafed at the loss of two precious days, for he could not help but think of the life-and-death battle back on Mars. But the time passed more quickly than he had expected, and it was less than forty-eight hours when he checked the last of their acceleration and penetrated the planet's atmosphere.

The planet on which Tragg left his booty was wreathed in clouds that completely blanketed its surface. They dived through to five thousand feet. Beneath this, the atmosphere was not clear.

It was muggy and steamy, and the occupants of the spaceship could barely distinguish the surface features.

"One might almost be gazing upon Earth during its Devonian or Pennsylvanian era," the professor mused. "Although, of course the atmosphere of Earth was not so misty then. Notice how the land and sea merge. It's a world of bog and water-logged, fern-like forests growing from the mud."

"Do you suppose anything lives there, daddy?" Nancy asked, peering through the large glass port that supplanted the vision screens when the ship was not in space.

"There undoubtedly is life, my dear," the professor replied, his face lit with the prospect of examining this strange new world. "Probably it takes the form of vegetation with some basic animal types just starting."

"Oh," Nancy remarked in disappointment. "I thought there might be savages down there, and we'd have to fight them for the treasure."

Crosse snorted.

"This is hardly the place or time to exercise your sense of humor," he observed dryly. "The citizens of Mars live only in the hope that we will return successful, and you prattle about 'savages.'"

"Don't be so stuffy, Mr. Crosse," Nancy replied. "I should hate to live in a world you ruled! Must you always be so dull and serious?"

"Good Lord!" the professor snapped. "Here we are hovering over a new world, and you two quarrel about non-essentials. Cruise about, Crosse, and see if you can't pick up that reflecting disc."

Hours later they were still in the air. The horrible suspicion that perhaps Tragg's diary was a hoax after all began to enter their minds, when suddenly Nancy screamed and seized her father's arm excitedly.

"Daddy! Look!" Her slim arm was extended to point out a low range of hump-backed peaks rising through the mists. The high land lay dead ahead, and Crosse was forced to throw on full braking power and swerve from his course to avoid a collision.

It was much brighter over the mountains, for the rising currents of air tended to dispel the thick blanket of clouds. In one place, pure sunlight poured through a break and touched the lush green landscape like a magic wand. The professor sighed with relief.

"I couldn't understand how a reflecting disc could attract our attention in such diffused light," he said. "Tragg picked the one place where such a device would work."

"I see it, father! I see it!" Nancy squealed, all but hopping up and down with delight. "Over there on that last mountain? Something glittered!"

Crosse brought the spaceship around and lowered it gently toward the peak Nancy indicated.

"Got it!" he agreed as a glint caught his eye.

The sides of the hill sloped shallowly, were level in many places. Crosse selected a likely spot for his landing and threw on a parking beam. Gradually advancing the beam's power until it supported the weight of the ship, he played it across the flat spot.

"Seems solid enough," he remarked.

After nosing about like a cat in an overstuffed armchair, the giant ship settled down. It sank a little as its weight packed the light foliage, then was still.

"Let's go!" Crosse said. "We have no time to waste."

"Wait!" the professor cried, as the young man hurried back through the ship toward the main port. "We don't know what the atmosphere is like."

Crosse barked an impatient word that was not meant for the ears of young ladies. He

was conscious of Nancy's amused eyes on him as he waited for the professor to make his analysis.

"All right," the little man pronounced at last. "There is sufficient oxygen."

Crosse released the pneumatic seals, and the port opened with a sigh.

"Watch your step," he warned. "The gravitational pull may be—"

NOT valuing his own advice, he leaped to the ground. The bound carried him twenty feet from the spaceship and landed him headfirst in the loose mud. When he picked himself up, the sound of Nancy's laughter filled his ears.

Something hit him on the side of the head and he was showered with mud. Angrily, he started back for the ship. Nancy was bending to pick up another handful of the snow-like earth to throw at him.

"Confound it, professor!" he growled. "Do something with that girl!"

"Boo!" she cried fearlessly and threw another dripping mudball at him.

He ducked the missile and before she could arm herself again, he had her arms in a tight grasp.

"I'm sorry, Mr. Crosse!" she laughed, brown hair tumbled over her eyes. "I just couldn't resist it. You were so vulnerable!"

The intolerant anger that was blazing in the young man's eyes died slowly. Something like a smile softened the stern set of his lips as he let the girl go.

"Your father should have spanked the living daylights out of you at least once a day while you were growing up," he told her. "You might have been a nice girl."

"MIGHT have been! I like that!" She brushed her hair back with the crook of her arm so as not to muddy it with her hands.

The professor, who had paid no attention to them, rose from his inspection of the soil.

"Most interesting!" he murmured. "It does not rain here because the heavy dews supply all the moisture needed, and there is practically no hydraulic erosion. In the lowlands, sedimentary rock is probably forming, but here—"

"Let it form," Crosse protested. "We have work to do, professor."

"Quite!" the old man agreed. "Nancy, you'd better put some boots on if you're going to play in that mud." This last observation was made so innocently that both Crosse and the girl burst into laughter.

"Father!" she cried, trying to sound annoyed. "I'm a grown woman! I don't play

in the mud."

But Crosse's impatience prevented any further discussion, and he and the professor trudged off to the top of the peak, armed with bolt guns and axes and booted to the hips.

Several hours passed before they returned. They stayed only long enough to swallow the food Nancy had ready for them before they set out again. The soft, pearly twilight of the strange planet was just beginning to mark the end of day when they returned a second time.

"We've found it!" Crosse told the girl exultantly. "Tragg's treasure! It's cached on the other side of the mountain. The markings he left have disappeared, that's why it took us so long. It's sealed against the weather with masonry, and we'll have to blast our way in tomorrow."

When day returned, Crosse and the professor set out again, carrying heavy blasting equipment. Left to herself, Nancy decided to walk down the mountain slope toward the misty flat lands that spread over the rest of the globe.

When Crosse and the professor reached the cairn, they discovered they had forgotten the cables for the bolt equipment. Crosse cursed his own stupidity, and immediately started back to the spaceship. He had just reached it and was about to climb through the port when he heard a faint scream. He paused, unwilling to interrupt his work, yet curious.

"Nancy!" he called. "Come out here."

There was no reply. A quick inspection of the ship showed Nancy was gone, and he found her deep, fresh tracks leading down the slope. Forgetting the cables he hurried after her, yanking out his bolt gun as he went.

The clarity of the air grew less and less as he pressed on, but his pace quickened as he heard another scream. The girl called to him, and the terror in her voice was unmistakable.

"Nancy!" he roared, glaring fiercely through the veil of mist. "Where are you?"

"Lance!" her voice came to him like a wail. "Hurry!"

The sound served to give him his direction, and he pushed through the tall rubbery grasses that now grew waist-high in lush profusion. Without warning, he broke suddenly upon a vast bog that stretched unbroken into the reaches of the mist. It was a sea of loose, semi-liquid mud, being neither land nor water to a decisive degree.

A hundred feet away, Nancy Oliphant floundered wildly, waving her arms in an effort to keep her balance as she struggled toward the solid bank on which Crosse stood. She turned an agonized face toward him.

"Lance!" she sobbed. "Hurry."

He stood there, perplexed, for the girl seemed to be in no danger. Then a huge lump of the muck boiled up close at her heels. A vast, shapeless creature threw itself at her, and a slit opened in its head, baring a ghastly white mouth with double rows of yellow fangs.

The powerful snap of the jaws came dangerously close to the girl's body. Then, writhing and wriggling with its loathsome coating of mud, the thing fell back again. Two more rose up, and still others behind them stirred the bog into activity.

CHAPTER VIII

Trailed

AT FIRST sight of the mud monster, Lance Crosse leaped into the bog and waded toward the terrified girl.

"Don't let them catch you, Nancy!" he called, trying to keep his voice calm. "I'll be with you in a moment!"

But the foremost of the mud beasts erupted from its slime again, and hideous jaws were bared by the peeling back of thick, mud-coated lips. Nancy half turned and saw the thing. Hypnotised with fright she stood still, trembling throughout her entire body.

The mud thing snapped at one of her outstretched arms, and it was instinct alone that brought her out of the lethargy. The yellow teeth raked her smooth flesh before she could turn. Her scream of pure terror ate at Crosse's heart like a hot iron.

The muck clung to his powerful legs as he drove through it. He panted with the exertion of pulling his feet out of the sucking holes at each step.

The girl stumbled suddenly and fell forward into the ooze. Her arms drove into it up to the armpits.

"Lance!" she moaned faintly. Her eyes were turned up to him, fastened upon him as her last hope.

The mud beast lifted its shapeless bulk once more. White eyes flicked open in a baleful direct gaze. Struggling through the mud, it neared the girl, its hide crawling in

a loose mobile way, its mouth wide open to reveal the dead white tissue within.

Even as he yanked his bolt gun out of its holster, Crosse heard the cry. So high-pitched was the tone that it seemed almost as if he were remembering it or conceiving it in his own brain. It was intermittent in a curious way, as if he were hearing only scattered parts of the noise. Evidently the vocal range of the mud beasts started in at the highest pitched tone human ears could hear and continued on up in an inaudible scale.

Crosse fired over Nancy's head and caught the creature squarely in the mouth with a heavy bolt. The explosion blew a large part of the thing's head off, and a rich yellow blood poured out. Silently the bulk of the maimed body slid beneath the turgid mud and disappeared.

"Lance!" Nancy sobbed, "Lance!" and grasped his knees.

He lifted her in a swift powerful motion of his left arm and held her close against him. Two more beasts lumped from the mud, gnashing their fangs and uttering their faint whistling cries. Crosse fired rapidly, and the mud fairly boiled with the death struggle of the creatures.

There were more beyond. Hundreds of them bobbed in the mud, gathering from the outer parts of the bog where the fog was thickest. It was hopeless to think of killing all of them. Crosse glanced over his shoulder and saw that none of them had as yet lumbered between him and the solid ground.

Picking up the girl and slinging her over his left shoulder, he wrenches his feet loose from the grasp of the mud and struggled back the way he had come. Behind him he could hear the barely audible cries of the beasts. They could wallow through the bog as fast as he could.

Sweat stood out on his forehead in glistening beads by the time he reached the bank and struggled up into the tall rubbery grasses. Placing the girl carefully down, he turned and directed his bolt gun at the creatures.

The more agile of them were already at the edge of the bog, leaping at the bank and snarling. Their bodies were vast sacks of muscles. In general shape, they resembled the walrus of Earth, although their blunt heads were much larger and their mouths vast caverns of destruction.

Crosse fired slowly and deliberately, picking off as many of the nearest beasts as he was able. But the multitude that remained continued doggedly to creep over the sub-

merged hulks of those who had gone before and died and sought to reach the bank.

One managed to cast itself up out of the bog. Crosse saw that it had four pairs of fleshy flippers on the underpart of its body and a powerful tail. Awkwardly, it lumbered toward him, mouth agape, but its progress on hard land was slow. Crosse shot it quickly.

But four others had managed to climb the bank. Seeing that it was hopeless to think of discouraging them, Crosse knelt and picked up the unconscious girl. Holstering his gun, he trotted through the rubbery grasses, following the trail he had made from the spaceship.

A hundred yards beyond, the mist began to thin, and he could see the outline of the peak clearly. He paused then and laid the girl down once more. She stirred while he was massaging her wrists and opened her eyes. For a while she lay quiet, staring at him, then a shudder passed through her lithe young body.

"Oh, Lance!" she moaned. "T-They were horrible!"

SHE GRASPED one of his hands and pressed it to her lips in a sudden grateful gesture. A slow warmth stole through his body with an intangible thrill to it. Lance Crosse, who had never known anything but bitterness and war and his own fiery beliefs, felt a quick surge of some new emotion.

He wanted to lift the girl in his arms and hold her cool youthfulness close to him in a crushing embrace. But all he did was pat her cheek in an awkward embarrassed way. She glanced up quickly, smiling through her tears. Witnessing that smile, he forgot the mud beasts lumbering through the grasses in pursuit.

"I'm—I'm such a nuisance, aren't I?" she whispered.

"No!" Crosse declared, and the explosiveness with which he said it surprised even himself. He flushed a deep red, thinking that she would make fun of him. Painfully, he said, "Lila," I—

"Don't call me Lila," she interrupted instantly. "Nancy is the name my mother gave me, and I like it better than my government tag."

Crosse looked confused.

"You told me once that if I ever had occasion to address you, I should call you Lila—your symbol."

She made a wry face.

"Don't remind me of the things I once

said, Lance. I've behaved abominably! But do you know you saved my life? Those ugly mud beasts meant to harm me!"

"Well," Crosse said hesitantly, releasing her and moving away slightly. "You saved my life once, so now we're even."

The girl's eyes flew wide with astonishment.

"I saved your life? When?"

"When Blake escaped from the Brozzian camp and knocked me out. I don't believe anything in the world would have kept Blake from killing me after he knocked me unconscious if someone hadn't stopped him—and you were the only one there."

"You knew then!" she breathed. "You knew I didn't help Blake escape."

"Yes. Zember freed Blake. But I had to keep that a secret from Druff and the others or they would have torn Zember apart. Now that it's over, I can't think of any way to make amends to you. But I do want to thank you for what you did—and apologize for what I did."

She smiled shyly.

"That's all right, Lance. I don't mind now that I know you didn't really think it was I. Blake was so ugly! I went to his room because he sent for me. He wanted me to help him get away, but Zember came along just then and freed him."

"After Blake knocked you down, he wanted to kick you to death, but I stopped him. He called me horrible names and struck me on the face. That was when I became a rebel!" Her brow wrinkled in puzzlement. "Why should you want to protect Zember if he betrayed you?"

Crosse's face went blank.

"Let's go back to the spaceship," he said roughly, and she knew the subject was dropped.

They climbed out of the mist until they could make out their path. Crosse spotted the ship and took Nancy by the arm to lead her toward it, but she stopped and pointed.

"Lance!" she screamed. "Look!"

Almost at the same moment, he saw it for himself—another spaceship hovering over the mountains in the clear bright air. A lonely shaft of sunlight caught its metal hull and flashed a reflection into their eyes as they stared at it.

"Impossible!" Crosse breathed. "That's JJ-3!"

A horrible fear assailed him.

"Perhaps Blake defeated my people! Perhaps that's Druff come to tell us about it."

Before either of them could take a step, the hovering spaceship darted down to the grounded ship. Destructive rays flashed from its belly, and the air rocked with the detonation of bolt discharges. A full broadside ripped into the undefended flagship, encasing it in a livid glare of destruction. In a moment it was over. The attacker withdrew and circled for a landing.

Crosse stared at the smoking ruin of his ship. The whole forward section had fused into a molten mass. His shoulders sagged.

Nancy's eyes were clouded with fear, but she knelt beside the rebel and put her arms about him.

"Don't, Lance!" she whispered. She was frightened by the slackness of his young powerful body.

"Marooned!" he said tonelessly. "Marooned on this cursed place. Druff and the others will perish."

The JJ-3 had thrown on its parking beam and come to rest beside its victim. A port opened in its side and men leaped out.

"Lance!" Nancy cried. "It's Blake and Zember!"

CRROSSE came to his feet with a bound. His eyes were blazing with uncontrollable wrath. Uttering a low growl that might have come from the throat of a hunting hound, he began to run up the slope toward the two ships, unlimbering his bolt gun as he went. Nancy called after him frantically, but he paid no attention to her.

The earthmen saw him coming, and Blake barked swift orders. They ran to intercept him, fumbling with their guns, and Crosse's bolt gun cracked in swift, successive shots. Three of the men tumbled to the ground.

Before they could open fire, Crosse was among them. His magnificent strength was unleashed by his rage, and he tore through them and raced for Blake. The Stapo chief reached for his gun, but Zember, who stood beside him, prevented him from firing.

Nancy screamed and buried her face in her hands. A Stapo man fired a bolt at Crosse. It did not hit him, but the concussion of its explosion knocked him flat. Immediately, the Stapo men dived on him.

When they stepped back, Crosse was staggering to his feet, his head bloody and his hands bound behind his back. Nancy felt a leaden weight descend over her heart. Reluctantly, she approached the men.

"Well, Crosse," Blake observed loftily, when the rebel was dragged before him. "I hoped you were in that ship when we blasted

it, but your impetuosity has brought you into my hands just as nicely."

Crosse was silent.

Heedless of the blood that flowed down his cheek from a deep scalp wound, he glared at the Stapo chief and kept his jaw tightly clamped.

"Nothing to say?" Blake sneered. "Good. I like rebels best when they keep their mouths shut. Unfortunately the rebels on Mars can no longer do that. They're all crying for mercy, and you can guess," he added insinuatingly, "that little mercy will be found for them."

"Blake," Crosse grated. "You're a liar! You want me to believe you captured the Brozzian camp, don't you? You want me to believe you got the JJ-3 there, but I know how you got that ship. Zember brought it to you in Xanadu!"

The lanky Martian standing behind Blake turned white. His face was a confusion of mixed emotions. He looked half sly and half apologetic. He did not speak, but his manner indicated that Crosse had hit upon the truth.

"Yes," Blake admitted calmly, "your rebels are still fighting. But when they find you don't return, they'll lay down their arms. And you won't return. You and Professor Olyphant will be abandoned on this planet, and the girl will be taken back to Earth for punishment."

Crosse was not listening. His eyes were on Blake, piercing him with a steady, contemptuous gaze.

"So long as I am alive, Blake, I will live in the hope that I will kill you."

Blake barked a swift command.

"Take these prisoners away."

It was a tribute to Crosse, in a way, that Blake did not question him concerning Tragg's treasure nor the whereabouts of Professor Olyphant. He knew that Crosse would die a thousand deaths before he would tell anything, no matter how unimportant.

Instead, Blake gathered his Stapo police and sent the out in searching parties. But they knew nothing of the reflecting disc and scattered themselves too widely over the country to search effectively. Night began to soften the misty skies, and Blake called his men in.

"We are in no hurry to find the treasure," he told them. "The government of Earth is already rich and powerful. For the Martians, is was a different thing."

A camp was set on the mountain slope, for the men were too cramped in the space-

ship. Shacks of flexible metal were erected over light frameworks and Crosse and Nancy were put in one of these with Stapo guards.

"What can we do, Lance?" Nancy whispered once they were alone. She was trembling and huddled close to him. "They'll find the treasure tomorrow, and they find my father with it."

"I'll find a way," he replied grimly. "Try to get some sleep. We must wait a little longer."

How much of the night passed before Crosse woke with a start he did not know. He lay quiet a moment, eyes wide and alert, trying to sense out the subtle cause of his awakening. Outside the tent the camp seemed to be absolutely silent. The guard was snoring heavily. Yet—there was something . . .

He rolled over on his side and nudged Nancy gently. She woke with a little cry, but his steady, hushed voice reassured her.

"Do you hear anything, Nancy?" he asked tensely.

She strained her ears, trying to analyze the elusive sounds of the night.

"You mean the sleeping guard?" she whispered.

"No! There's something else!" he hissed.

Once more they listened. The sound, whatever it was, was faint. Faint and unbelievably high-pitched. It was a sound that might have been dreamed, a sound that one ought to be hearing but could not.

"Lance!" Nancy cried suddenly in a terrified, hushed voice. "The mud beasts!"

CHAPTER IX

The Mud Beasts

HIS blood went cold within him. So much had happened since the adventure in the bog that he had forgotten the loathsome creatures. What strange unfaltering persistence drove them to pursue their quarry up the grassy slope from the bog?

Were they so starved that they willingly climbed the slope and left their native mists merely for the hope of a meal? A sudden memory picture of the bared white gums and staring black eyes assailed his brain, and he shuddered in spite of himself.

"Lance, my darling!" Nancy was sobbing. "What can we do?"

"Whatever we do," he whispered in reply, "we must be clever. These mud beasts may give us our chance to get away."

"But all those Stapo men out there!"

"The Stapo wasn't too solicitous of us! We can't afford to risk our own safety merely to warn them."

There was a gasping sound outside their tent that froze their blood. It sounded like the noise a man might make if he woke from his sleep into a living nightmare. It ended with a gargled, inhuman sob. Then they heard another sound—one that brought cold perspiration to their bodies. An animal crunching noise, it was like a soundless thing crunching the bones of its fallen adversary.

"The mud beasts got one of the guards!" Lance whispered.

IN a sudden titanic effort, Crosse brought the strength of his great biceps to bear against his bonds. Gritting his teeth against the pain, he strove to break the slim, steel wire, but he was forced to give it up. Warm blood poured over his wrists.

They heard a dragging, muffled noise outside their tent, and they knew one of the mud beasts was coming. It lumbered against the canvas and paused a moment, close beside the sleeping guard. They could almost see it rising on its flippers and launch its deadening weight upon the Stapo man.

They heard the dull thud of the two bodies meeting. The guard uttered a startled squawk, but great savage jaws closed upon his face and bit deep, wrenching the whole front of his skull off.

Other mud beasts crawled up and joined the first. The sickening sounds of the feasting made Nancy faint. She rolled close to Lance and pressed against him to seek protection. Neither said a word, for the fear was in both their hearts that the mud beasts would enter the tent when they had finished devouring the guard.

They waited until their muscles ached with the tension of waiting, praying that one of the guards might wake up and see what was happening. But the beasts were too silent.

The fly of the tent stirred. It was pitch dark inside, but the slight motion revealed the pearly grey of the night outside. Nancy drew her breath in a quick little cry.

"Steady!" Crosse breathed, wishing only that his hands were freed.

The fly was brushed aside. The bulk of a mud beast bunched against the gray sky. It waddled toward them.

Then Nancy screamed. The terror made her voice loud and piercing. She screamed again and again, madly seeking relief for her taut, singing nerves.

"Lance! Lance!" she shrieked. "Don't let them hurt me!"

The mud beast snorted, and they could hear its breathing and its thin wail of a cry. Part of it brushed against his foot. Something snapped inside his brain. Nancy's genuine terror and her plea to him was more than he could bear. Raging like an animal run amuck, he wrenched at his bonds.

He could no longer feel the pain of the torn flesh. Using the leverage of his entire arm, he pried at his wrists. The steel snapped with a clear twang. He bent double and tore at the bindings on his ankles. The slip catch gave instantly, and he was free.

Nancy was still screaming, wriggling to get away from the hideous creature that occupied the darkness with them. Outside, lights were snapping on, and men were shouting. But Crosse did not hear them. Unarmed as he was, he threw himself on the mud beast.

For a brief moment he was sick at what his fingers touched. The hide of the beast was like the bog itself, loose and slimy. It crawled on the beast in a repulsive fashion, wrinkling into deep furrows and then smoothing out. His hands were caught in one of these wrinkles, but he yanked them free and sought the thing's head.

It turned on him ponderously and he felt its warm breath as it snapped at him. It had no brain, merely an instinct to kill and devour. He could not grasp it because the skin crawled beneath his touch. There was no neck. As he pounded it madly, it rose beneath him in an upheaval like a bucking Earth horse, and he fell off its back.

"It's touching me!" Nancy cried.

Desperately, Crosse pulled the girl from under the beast and pushed her out of harm's way. Then he grasped the thing's broad tail and heaved it up over his head. For a moment the beast struggled aimlessly. Then the tail lashed a single powerful blow and threw Crosse sprawling to one side.

"Don't fight it, Lance!" the girl sobbed. "It will kill you!"

But Crosse had no ear for her words. He dived at the mud beast and sank his powerful fingers deep into its folded skin, searching for some vulnerable point. The hide was like three-inch leather and everywhere of the same thickness. Groping about the base of its hemispherical head, his fingers suddenly

sank into a crevice. The mud beast quivered and lay still.

Triumphantly, Crosse thrust his whole arm into what seemed a gill slit. He grasped with his strong fingers what he found there and pulled mightily. It ripped loose and he dragged it through the gill slit. A foul stench broke through the tent, and the mud beast gave a powerful twist that threw Crosse flat on his back, still grasping the vital organ he had wrenched out.

In the throes of an agonized death, the thing flapped and grovelled about the tent. Crosse paid no more attention to it. Wiping his hands, he crept over to where Nancy lay.

"Are you all right, Lance?" she whimpered.

He took her in his arms, bound as she was, and pressed her close to him as he had wanted to do in the bog. Then he released her and unsnapped the steel lashings from her wrists and ankles.

"Come!" he said.

THEY stepped outside the tent, but a glare of floodlights struck them. Crosse leaped back behind the tent fly, pulling the girl with him. As soon as his eyes could accommodate themselves to the light, he inspected the scene carefully.

The mud beasts were everywhere. Countless numbers of them writhed along the ground, concentrating wherever a human body lay. Blake and his men, those that remained alive, had withdrawn to the side of the camp nearest the spaceship. The powerful cadmium lights of the ship bathed the bobbing sea of beasts with light, and the Stapo men poured a steady fusillade of bolts from their guns.

With their slow, almost patient single-mindedness, the beasts fought to approach Blake and his men. They did not seem to fear the blazing bolt guns, nor to associate their dying companions with the explosions. They pushed insistently on and would have been completely annihilated if there had not been so many of them.

The tent in which Crosse and Nancy stood was on the opposite side of the camp from the spaceship, and the mud beasts intervened between them and Blake.

"If we can get past them and out of range of Blake's guns we might get free, Nancy!" Crosse hissed.

The girl's lips were trembling, and her eyes were still wide with hysteria. He looked at her keenly.

"Do you think you're in any condition to

run?" he asked.

Some of the fear left her face. She straightened a little and squared her shoulders.

"You lead the way, Lance," she said simply. "I'll follow."

His powerful hands touched her shoulders in a momentary gesture of affection.

"Remind me to like you," he said gruffly.

They stepped out of the tent. The nearest mud beasts were facing the other way, but with fatal instinct, they turned. Instantly the wide, white jaws opened, and they crawled toward the pair.

Crosse shot a quick glance across the camp. Blake was roaring an order for those in the JJ-3 to put the ship's bolt batteries into action. His face was pale with rage and fear, and his attention seemed wholly occupied with repelling the beasts.

"Come! Quickly!" Crosse whispered.

Taking Nancy by the hand, he ran off around the tent, kicking at the nearest of the massive beasts. Behind the tent, there were no beasts. Nancy stumbled, but Crosse swept her up into his arms and ran swiftly along the smooth slope of the mountain. The cool grayness of the night enveloped them and, as the cries of the Stapo men and the explosions of the bolt guns died away, a sensation of peace and security came to them.

When the curve of the mountain intervened between them and the camp, Crosse stopped and set Nancy on her feet. They stood still a moment, leaning against one another lightly.

"That's the second life I owe you today," Nancy said.

Although he was panting from the run, he managed to adopt her attitude of pretended casualness.

"Getting to be a habit, isn't it?" he asked gruffly.

"Thank you, Lance," the girl whispered.

THE dim dawn was beginning to gloss the sky, appearing at no particular horizon, so diffused was its light. Crosse picked his way around the slope of the mountain and found his way without trouble to the treasure cache. But the masonry walls that guarded the treasure were lying in shambles. Soft lights glowed from a cavern within. Crosse stooped and picked up a jagged fragment of rock before he entered.

"Professor Oliphant!" he called.

"Eh?" The little grey-haired man thrust his head above a pile of huge cases. "Who's

that? Crosse! Where have you been? I couldn't wait for you to come back with those cables so I had to rig up the bolt blaster to work without them."

"Father!" Nancy cried, rushing to him and flinging herself into his arms.

"What is the matter?" he demanded.

Crosse told him hastily, describing the destruction of their spaceship and the attack of the mud creatures.

"Interesting!" the professor observed sleepily. "If they attacked you, they must be carnivorous, and if they're carnivorous there must be other animals on this planet for them to eat. You see, in biology—"

"Daddy!" Nancy wailed. "Forget those awful creatures! How are we going to get off this planet?"

The professor stared at them vacantly a moment, then suddenly seemed to come awake.

"Of course!" he crowed. "You haven't seen the treasure!"

Motioning them to follow, he led the way out of the cavern to a roughly hewn corridor that penetrated straight into the side of the mountain and terminated in a vastly larger cavern. In the middle of this cave, lighted by the soft glow of cadmium lamps, was a long, sleek spaceship, much smaller than the flagship that had been destroyed, but gracefully designed and beautifully constructed.

"When Tragg came here with his treasure, he brought a spare for every part in his spaceship. Like the wise man he was, he assembled these parts into another spaceship and left it here. It's equipped with working models of all his inventions, several of which I found entirely new in principle. I've had a fascinating time inspecting them."

A sob escaped Nancy's lips as she realized what the spaceship meant. Crosse gazed at her fondly and repeated the words he had said to Blake—

"So long as there's life, there's hope!"

"One of the most interesting of Tragg's inventions," the professor continued, as if he were lecturing, "is what he calls his 'peace weapon'—a misnomer if ever there were one, for no weapon can truly be called a peace weapon. Yet Tragg asserts that this particular weapon is so powerful that it insures peace for whoever possesses it."

"What's that?" Crosse cried, his eyes lighting.

The professor started back through the corridor that led to the ante-chamber. Crosse and Nancy followed, but when they stepped out into the outer cave, they found

the professor standing stock still with his hands raised, staring at the dangerous end of a bolt gun. The gun was in Blake's hands, and behind him stood Zember and two Stapo men.

"Did you think you left unnoticed, Crosse?" Blake asked unpleasantly. "Those searchlights picked you out just as you were stealing around the shack. I left the largest part of my men to clean up those ugly animals and followed you here. You led me right to the treasure!"

CHAPTER X

Return to Mars

HIS eyes glittered suddenly, and he lifted his bolt gun and trained it on Crosse. "You have broken the laws of the Diktor and you have fled the just punishment that awaited you at the hands of the Stapo. I can be lenient no longer. You must die!"

His finger tightened about the release button of the bolt gun, and at the same moment Peter Zember lurched forward, his face drawn and pallid.

"Not that, Blake!" he screamed. "You promised you wouldn't kill him!"

He wrapped his long arms around Blake and tried to pull him back, but the powerful Stapo chief threw him off with a curse and turned on him. The bolt gun spat blue flame, and Zember crumpled as the bolt exploded inside his body.

Zember's interference had given Crosse his chance. Launching himself through the air, he collided with Blake and knocked the gun from his hands. They went down together.

Nancy leaped forward nimbly and caught up the gun, training it on the two Stapo men who had also had designs on the weapon.

"Stand back!" she warned them. "If you try to help Blake, I'll kill you!"

They took one look at the weapon and at the trembling, nervous fingers that clasped it and decided to obey.

Blake was a powerful man. His body was padded with muscle, and he could absorb a great deal of punishment. The fighting was in his favor, for he could wrap his arms around Crosse and exert the powerful, slow pressure of which he was capable.

But Crosse had no intention of being beaten. With the instinct of a fighting man,

he knew it was the most important battle of his life. Throwing all his weight into it, he pounded Blake on face and body with sledgehammer blows, struggling all the while to free himself of the other's bearhug. Finally he managed to bring an uppercut through Blake's arms, and the Stapo chief grunted in pain, relaxing his hold for a moment.

Crosse was on his feet like a cat, dragging Blake after him. Pausing for the slimmest part of a second, he struck Blake on the point of the chin with all his strength. The sound of breaking bones was almost like that of a small-calibre bolt discharge. Blake collapsed backward with his head bent at a curious angle.

Crosse stepped back from his fallen enemy, his arms still tense and poised. His breath came in long sobs, for Blake had come close to strangling him. Nancy touched him gently and pressed him back upon the pile of boxes. Skillfully she massaged his aching throat and tired arms.

"Lance!" she whispered. "You were magnificent! If only your Martian people could have seen how well you fought for them!"

Their eyes met, and he took her hands in his.

"Oh!" she cried suddenly and leaped to her feet. The two Stapo guards were gone. "I forgot to watch them!"

"Let them go," Crosse said. "They'll probably go back to their spaceship."

She knelt beside him again. Unexpectedly, she began to cry. Crosse pulled her head against his chest tenderly. Then he became aware of the professor's amused and interested gaze, and his face went red.

"It's all right now, Nancy, dear," he told the girl, patting her on the head.

"Of course it is, my darling!" she sobbed. "But suppose it wasn't! Suppose they killed you!"

The professor's grunt of disgust was clearly audible.

"Crosse," he said irritably, "we have to pack as much of this stuff on Tragg's ship as it will carry. No time to lose."

Crosse sighed and got to his feet. With the help of the professor and Nancy, he began to carry the boxes and bales through the corridor into the inner cavern where the spaceship lay. They worked for an hour, picking the most valuable and usable treasures.

"That's enough," Crosse said finally, wiping his brow. "We can come back for the rest."

THEY entered the spaceship and sealed the ports.

Crosse inspected the controls to familiarize himself with them before he settled himself in the pilot's seat.

"Here we go," he muttered and ran out the forward battery of bolt guns. The roar of their discharge was deafening, but when the smoke and fumes cleared, a hole had been blasted through the mountainside. Crosse sent the ship through the aperture and into the steamy air. He circled the mountains once.

"The JJ-Three is still here!" he cried.

They all glanced down through the glass port in the floor. The Stapo men were running about the ship, loading the camp equipment aboard. One of them spotted the spaceship in the air, however, and they dropped their work. The JJ-3 lifted from the sloping mountainside and blasted into the air.

"They thought we were going to attack," Crosse said. He watched the JJ-3 diminish in size as it roared toward space. "I wonder if they know how to use the coupler," he murmured.

Following upon his words like a punctuation mark was an explosion of unimaginable force. The JJ-3 disappeared in a white blankness, and lines of force washed out from it as do ripples in a pool. Their own spaceship bucked and was thrown over on its side. Crosse shot full throttle to the tubes and saved them from a collision with the ground.

"What was that!" he cried, when the ship was level again.

The professor's face was strained.

"You remember that the JJ-Three was the ship I discarded when it was almost finished! I said it was too dangerous. There was a one-to-one-hundred chance that it would destroy itself. The mathematics of probabilities have just demonstrated this. The JJ-Three blew up because its hull screen of power could not close fast enough for the flow of basic energy."

Crosse and Nancy were silent. The realization was dawning in the minds of both that the JJ-3 was equipped with a replica of Tragg's coupler, and the ship they were in had identical equipment. Would that one-in-one-hundred chance wreck their chance of reaching Mars?

Nancy's knuckles were white as she grasped the arms of the chair in which she sat. Both Crosse and her father were watching her, and she managed to smile.

"Shouldn't we be on our way?" she asked shakily.

Crosse smiled at her.

"Good girl!" he said quietly. Then, to the professor, "Whenev'er you're ready, sir."

The old man kneeled beside the coupler. A slight frown was on his face, as he inspected the instruments and gauges on its case.

"At any other time, under any other conditions, I would be glad of such dramatic proof of the superiority of my coupler to Tragg's," he said. "But under the circumstances I—"

His words trailed off into a meaningless mumble, and he grasped the main switch that would throw a reservoir of power into the metal of the outer hull. A blinding flash filled the control room, and Nancy screamed. A moment later the vision screens were a neutral gray, and a small indicator bulb was blinking monotonously atop the coupler. They stared at each other foolishly.

NANCY collapsed into her chair and shivered.

"I don't know which one of the ninety-nine chances we hit, but I'm glad it wasn't the hundredth."

Crosse locked the controls and swung out of his chair.

"Now for Zember," he said tersely. Nancy and her father glanced at him with interest. "Zember was my half brother, the son of my mother and her first husband—a true Martian. As you know, the true Martians were a weak-willed race.

"Their courage was broken and their morals were sapped. They were almost extinct when the first Earthmen arrived on Mars, and intermarriage was rare. Zember, I believe, was the last man to have true Martian blood in his veins.

"We grew up together after my mother and father died, and Zember was all I could ask for in a brother. I owed my very life to him. And so, when he began to get his spells at the age of fifteen, I loved him just as much as always and tried to help him.

"True Martian blood does not mix with Earth blood. Zember was either all Earth or all Mars. When his Earth character was dominant, he was a fine, industrious, able man—a keen scientist. But he had spells, one of which you witnessed, Professor Oliphant, when his Martian character came to the fore, and he turned into a wheedling, avaricious, shiftless creature.

"For many years he was Martian and he

hung around Xanadu, scraping the crumbs from the governor's table, and that was why my rebels hated him. But I couldn't desert Peter Zember, because I loved him and knew that he could not help his biological fault.

"That was why I took him in with us, hoping it would give him some self-respect and keep his Earth character forever dominant.

"But you saw the result. He reverted, helped Blake to escape, stole the JJ-Three and finished the coupler on it and brought Blake after us. And yet—I do not regret having helped him."

"Nor should you, Lance," Nancy said softly. "He died bravely, and in dying did more for the rebel cause than anyone on Mars."

Crosse made a wry face. "The rebel cause! I hope there still is one. If the governor has had reinforcements he might have been able to smash our fleet and take the Brozzian camp. If that's the case, Tragg's treasure will do us no good."

"Nor his peace weapon either," the professor said.

"How does that work?" Crosse asked. "You were about to tell us when Blake interrupted."

"You should have listened the first time," the professor said grumpily. "In those boxes we carried aboard is a good supply of ion-element. It is used in a handy little gadget Tragg invented, which I have labeled 'peace weapon.'

"Tragg flattered himself when he thought it was too terrible a weapon for the diktors to have. It is limited to purely defensive use, simply because the power required to make it effective couldn't be contained in any known spaceship. It would have to be set up on the ground."

"But how does it work?" Crosse insisted.

"This ion-element can be put in shell cases that are made of anything except carbon or its compounds. When it is fired into the air, and exploded by conventional bolt methods, the free ion-metal breaks down the carbon dioxide in the atmosphere and dismantles its atomic structure.

"This causes a partial vacuum, and the surrounding air rushes in with terrific impact—sort of an inverted explosion. But the charm of the thing is, that if enough power stations were built on Mars and enough projectors, the entire atmosphere could be kept free of spaceships.

"Just one of these devices can cover about eighty square miles in area to a height of five

miles, and it could destroy any ship venturing within its scope. See what I mean?"

"Of course!" Crosse cried. "We can rig up enough of these weapons to cover the whole of Mars, and no Earth ship would dare to attack us! Professor, it means the revolution will be a success!"

"Provided, of course," the professor replied somberly, "your rebels have managed to resist the Earth forces until we get back."

They could not know the outcome of Druff's defensive battle for six hours. Radio could not reach across the gap that separated them from Mars, and even if they were able to build up a strong enough signal, it would be years before the wave could get through.

SIX hours later, Crosse was waiting at the control transmitter, and when the coupler threw out its hold on the basic energy flow, he snapped on the phone and called the Brozzian camp.

"Lance Crosse calling!" he said. "Give me Druff!"

Nancy moved close to his side, eager to hear if there would be response. Crosse held his breath, fumbling impatiently with the amplifier controls.

"No answer!" he groaned.

"Calling Crosse!" the amplifier suddenly blared. "Druff is at the front. Can we give him a message?"

"Hurrah!" Nancy shouted and threw her arms around Crosse's neck. Grinning hugely, he swept her off her feet and swung her high in the air.

"Stop!" she squealed. "Ask them if the camp is still safe."

Crosse set her back on her feet, and picked up the transmitter.

"Have you been able to hold the Earth fleet?" he barked. "Have those reinforcements gone into action against you?"

The amplifier gargled, then the voice of the coordinator at the Brozzian camp came through.

"Of course we've held out! The governor hasn't gained an inch from Druff. When Blake left, the Earth fleet went back to their old method of fighting. Druff said he wanted to capture Xanadu before you got back, but he hasn't quite managed it yet.

"The Earth reinforcements were called back to First City to suppress the revolution that is rising on Earth. Would you like me to give Druff a message?"

"Certainly!" Crosse replied promptly. "Tell him we will reach the camp in three

days with most of Tragg's treasure. Tell him to leave some of the governor's fleet intact, because we have a new weapon to try out. Tell him the revolution is won, and Mars is free—"

He glanced at the girl who stood beside

him, her lips slightly parted and her eyes glowing with the strange, lovely light of a woman in love.

"Tell him that light brown hair, especially when wavy, can do strange things to a man's heart!"



Perry Wren, diminutive bank teller, suddenly becomes a giant when a Scientist creates a Hollywood "force dome" in

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GAS ATTACK

By FORD SMITH

A Korean Lady Flier Helps to Repel Jap Invaders!



IT WAS the twenty-fifth year of the war, and Anticeto Niid was droning her way along above an apple orchard in Maryland. The countryside looked peaceful, but there was no way of knowing what innocent-appearing field might harbor green-winged Japanese invaders. So Miss Anticeto Niid watched alertly as she flew above enemy-held territory.

Anticeto Niid fought on the side of America. She was a flier from Korea, brought to the United States to help repel the deadly little brown invaders from the Japanese Archipelago. And the hate all loyal Koreans have for anything Japanese is well-known.

Droning along at cruising speed, Anticeto Niid suddenly came to the alert. Something was coming in on her directional antennae. She tuned in more finely, listened to the buzzing code, then swerved downward at a nine o'clock angle.

Straight for the apple orchard she headed in a dive-bombing maneuver which looked like a suicidal dive. Then, when disaster seemed unavoidable, an opening appeared in the foliage, tree branches thinned out, and the apparently rash flier easily checked her flight and set down lightly, close to a small crater or shell hole.

Down in this crater she caught sight of some of the Japanese enemy crawling along, planning an attack of their own. Making sure that all of her fighting tools were in working condition for a hand-to-hand engagement, Anticeto Niid descended the near side of the crater and crawled carefully along in a

counter-direction. As the two lines of march crossed each other, the Korean flier crouched—and leaped upon the back of the hindmost Japanese enemy.

There was no outcry—only the slight sounds of a terrific struggle accomplished without a word being spoken. Not for an instant did Anticeto Niid relax her advantage. Gripping her adversary tightly, she plunged a hypodermic into his fat neck close to where the jugular vein should have been. Then, as the drug took effect, the Korean scout swiftly attached one of her explosive eggs to the unconscious Jap and moved quickly onward after that slowly moving file of enemies.

Death was the same as in any battle, but here the methods of warfare were different. Perhaps the methods of this Korean flier were a sort of combination of various tactics used in the Second World War—a mixture of judo and Commando tactics, and as brutal and ruthless. Mercy and quarter were unknown in such a desperate war of extermination as this.

SO INTENT was Anticeto Niid on her stalking job that she failed to note the stealthy approach of a squad of American men with a gas outfit, men who were just as intent on trapping the enemy as was she. Before the Korean fighter had a chance to make her presence known or to escape the deadly deluge of chemical warfare, a sharp blast of cold carbon dioxide—the prelude to a more deadly chemical attack—swept down through the crater. Japanese alien and Korean flier alike were transfixed in a state of unconscious stupor.

Contrary to the hundred-year threat of the Yellow Peril along the Pacific Coast, the little brown invaders had struck without warning twenty-five

years ago along the Eastern Seaboard of the United States. It was in New Jersey—at the town of Riverton—where the invaders first struck. Infiltration tactics were used to get into the country undetected in the beginning. In disguise they got themselves smuggled in, following the agricultural and gardening pattern used so successfully in California during the first half of the twentieth century—an infiltration attempt that was doomed to failure because of the premature attack on Pearl Harbor.

In their invasion on the Atlantic Ocean side of the country the little brown devils had been more subtle, more insidious. They didn't make themselves conspicuous at first. They didn't run around snapping pictures or spying on American shipping and fortifications and military secrets. They simply dug in and solidly entrenched themselves in farm and rural life as unobtrusively as any domestic pet could have done.

There were no flights of bombing planes, no clouds of parachute troops, no massing of naval vessels—none of that spectacular and overwhelming stuff. Infinitely more destructive and dangerous, these deadly little brown devils calmly penetrated to the heart of the eastern United States while American citizens went carelessly and indifferently about their private affairs.

For seven years the invaders worked at their fifth column tasks, practically unnoticed and unheeded. There were occasional alarmists; and now and then a few Federal agents come poking around to make inquiries and experiments and investigations. But nothing serious was done about halting the enemy. Nobody suspected the aim and purpose and extent of the plans of the invaders until that terrible day seven years after the initial discovery of a Japanese colony at Riverton.

Then it was too late for peaceful tactics. The brown invaders had grown too numerous and too strong. They had conquered twenty-five hundred square miles of territory, marching through New Jersey and deep into Pennsylvania.

America awoke at last to her peril. Once more the slumbering giantess of democracy had blundered tolerantly along, nursing another nest of vipers in her ample bosom. Thirty-two thousand troops of the enemy were stopped as they attempted to invade New York. But the damage was done. New Jersey and Pennsylvania and parts of Maryland and Virginia had fallen into alien hands.

Suddenly all pretense of peaceful penetration was thrown aside. War was declared, a war to the death—a war that was to last for more than twenty-five years. A war that was to involve fighters and scientists of a dozen countries. A war that was to renounce all claims to humane and civilized tactics, reverting to primitive savagery and the latest products of the scientific laboratory.

For twenty-five years America had been fighting a losing battle as the Japanese horde continued to spread out in engulfing circles and maintained a steady advance. Fighters from various countries were imported into the United States to gain experience and knowledge in fighting against the Japanese hosts. For twenty-five years the bloody conflict had gone on up to that afternoon that Anticeto Niid was gassed in that apple orchard in Maryland along with several thousand of the Japanese aliens.

FOR how was a simple Korean flier to know what plans had been made by the American Federal Government? How was she to know that this particular field and battle area had been selected to try out a deadly new disease warfare against the little brown enemy?

She could not. And so Anticeto Niid, a staunch little Korean ally of the United States, succumbed to a complete black-out as the American field crew of chemical warfare surprised an enemy area and blanketed it with gas. The little Korean never knew what struck her. Her last thought was that a mysterious death was overtaking her before she had completed her mission.

What men did behind the battle lines,

in gleaming white laboratories, and at the nation's capital, meant nothing to her. Anticeto Niid was a simple Korean fighting machine. Her job was to destroy the Japanese enemy, and that was what she had been doing when a Jap Nemesis overtook her.

* * *

The squad of Government men from the Federal Experiment Station at Moorestown, New Jersey, working in a field in Maryland, ceased spraying their gas and set about gathering up the Japanese beetle grubs for inoculation with the new type A milky disease. One of them uttered an exclamation and knelt down to retrieve a tiny winged insect from a small crater.

"Well, what do you think of that?" he cried. "We interrupted a Korean anticerotiid wasp at work laying her eggs on these beetle larvae. What a shame! I guess that gas killed her."

"Not at all," said the leader of the field group. "Lay her aside carefully, and she will come out of that carbon dioxide stupor after a bit. She'll live to dive-bomb a thousand more of these beetle grubs for us."

The first field worker reverently placed the little wasp safely on an apple leaf.

"Pleasant dreams, little lady," he murmured. He was a sentimentalist at heart. "The war will continue," he said softly.



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By ALBERT DE PINA

Coming Next Issue!

Backache, Leg Pains May Be Danger Sign Of Tired Kidneys

If backache and leg pains are making you miserable, don't just complain and do nothing about them. Nature may be warning you that your kidneys need attention.

The kidneys are Nature's chief way of taking excess acids and poisonous waste out of the blood. They help most people pass about 3 pints a day.

If the 15 miles of kidney tubes and filters don't work well, poisonous waste matter stays in the blood. These poisons may start nagging

backaches, rheumatic pains, leg pains, loss of pep and energy, getting up nights, swelling, puffiness under the eyes, headaches and dizziness. Frequent or scanty passages with smarting and burning sometimes shows there is something wrong with your kidneys or bladder.

Don't wait! Ask your druggist for Doan's Pills, used successfully by millions for over 40 years. They give happy relief and will help the 15 miles of kidney tubes flush out poisonous waste from the blood. Get Doan's Pills.

(Adv.)



Virgil and Brad were entering the place of crystals

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FOREWORD

A LITTLE OVER year ago, Solar Arbitrary Time, a message rocket dropped into the receiving chute at the Interworld Space Authority headquarters on Mars.

It was a manuscript, telling a story so strange and terrible that it was difficult to believe that any sane human being could have been guilty of such crimes.

However, through a year of careful investigation, the story has been authenticated beyond doubt, and now the ISA has authorized its release to the public, just exactly as it

was taken from the battered rocket. The Veil—the light that came from nowhere to swallow ships—has disappeared. Spacemen all over the Solar System, tramp traders and captains of luxury liners alike, have welcomed this knowledge as only men can who have lived in constant peril. The Veil is gone, and with it some of the crushing terror of the Alien Beyond.

We know its full name now—the Veil of Astellar.

We know the place of its origin; a world outlawed from space and time. We know the reason for its being. Through this story, written in the agony of one man's soul, we



THE VEIL OF ASTELLAR

By LEIGH
BRACKETT

know these things—and we know the manner of the Veil's destruction.

CHAPTER I

Corpse At the Canal

THREE had been a brawl at Madam Kan's, on the Jekkara Low-Canal. Some little Martian glory-holer had got too high on thil, and pretty soon the spiked knuckle-dusters they use around there began to flash, and the little Martian had pulled his last feed-valve.

They threw what was left of him out onto

the stones of the embankment almost at my feet. I suppose that was why I stopped—because I had to, or trip over him. And then I stared.

The thin red sunlight came down out of a clear green sky. Red sand whispered in the desert beyond the city walls, and red-brown water ran slow and sullen in the canal. The Martian lay twisted over on his back, with his torn throat spilling the reddest red of all across the dirty stones.

He was dead. He had green eyes, wide open, and he was dead.

I stood by him. I don't know how long. There wasn't any time. No sunlight shimm-

Trapped by a Dread Sky Secret, Steve Vance

is Forced to Choose Between Treachery and Doom!

mered now, no sense of people passing, no sound—nothing!

Nothing but his dead face looking up at me, green-eyed, with his lips pulled back off his white teeth.

I didn't know him. Alive, he was just another Martian snipe. Dead, he was just meat.

Dead, the Martian trash!

No time. Just a dead man's face, smiling.

And then something touched me. Thought, a sudden bursting flame of it, hit my mind, drawing it back like a magnet drawing heavy steel. Somebody's thought, directed at me. A raw, sick horror, a fear, and a compassion so deep it shook my heart— One clear, sharp thrust of word-images came to me now.

"He looks like Lucifer crying for Heaven," the message said. "His eyes. Oh, Dark Angel, his eyes!"

I shut those eyes. Sweat broke cold on me, I swayed, and then I made the world come back into focus again. Sunlight, sand, noise and stench and people crowding, the thunder of rockets from the spaceport two Mars miles away. All in focus. I looked up and saw the girl.

SHE was standing just beyond the dead man, almost touching him. There was a young fellow with her. I saw him vaguely, but he didn't matter then. Nothing mattered but the girl. She was wearing a blue dress, and she was staring at me with a smoke-gray gaze out of a face as white as striped bone.

The sunlight and the noise and people went away again, leaving me alone with her. I felt the locket burn me under my space-man's black, and my heart seemed to stop beating.

"Missy," I said. "Missy."

"Like Lucifer, but Lucifer turned saint," her mind was saying.

I laughed of a sudden, short and harsh. The world came back in place and stayed there, and so did I.

Missy. Missy, bosh! Missy's been dead a long, long time.

It was the red hair that fooled me. The same dark red hair, straight and heavy as a horse's tail, coiled on her white neck, and her smoke-gray eyes. Something, too, about her freckles and the way her mouth pulled up on one side as though it couldn't stop smiling.

Otherwise, she didn't look much like Missy. She was taller and bonier. Life had kicked her around some, and she showed it.

Missy never had worn that tired, grim look. I don't know whether she had developed a tough, unbreakable character, such as the girl before me, either. I couldn't read minds, then.

This girl, looking at me, had a lot in her mind that she wouldn't want known. I didn't like the idea of her catching me in a rare off-moment.

"What do you babies think you're doing here?" I said.

The young man answered me. He was a lot like her—plain, simple, a lot tougher inside than he looked—a kid who had learned how to take punishment and go on fighting. He was sick now, and angry, and a little scared.

"We thought, in broad daylight it would be safe," he answered.

"Day or night, it's all the same to this hole. I'd get out."

Without moving, the girl was still looking at me, not even realizing that she was doing it. "White hair," she was thinking. "But he isn't old. Not much older than Brad, in spite of the lines. Suffering, not age."

"You're off the Queen of Jupiter, aren't you?" I asked them.

I knew they were. The Queen was the only passenger tub in Jekkara then. I was interested only because she looked like Missy. But Missy had been dead, a long time.

The young man she thought of as Brad spoke.

"Yes," he said. "We're going out to Jupiter, to the colonies." He pulled at the girl, gently. "Come on, Virgie. We'd better go back to the ship."

I was sweating, and cold. Colder than the corpse at my feet. I laughed, but not loud.

"Yes," I said. "Get back to the ship, where it's safe."

The girl hadn't stirred, hadn't taken her eyes off me.

Still afraid, not so compassionate now, but still with her mind on me.

"His eyes burn," she was thinking. "What color are they? No color, really. Just dark and cold and burning. They've looked into horror—and heaven . . ."

I let her look into them. She flushed after a while, and I smiled. She was angry, but she couldn't look away, and I held her, smiling, until the young man pulled her again, not so gently.

"Come on, Virgie."

She broke free from me then, turning with an angular, coltish grace. My stomach felt

like somebody stabbed it, suddenly. The way she held her head . . .

She looked back at me, sullenly, not wanting to.

"You remind me of someone," she said. "Are you from the Queen of Jupiter, too?"

Her voice was like Missy's. Deeper, maybe. Throatier. But enough like it.

"Yeah. Spaceman, First Class."

"Then maybe that's where I noticed you." She turned the wedding ring on her finger, not thinking about it, and frowned. "What's your name?"

"Goat," I said. "J. Goat."

"Jay Goat," she repeated. "What an odd name. But it's not unusual. I wonder why it interests me so much."

"Come on, Virgie," Brad said crossly.

I didn't give her any help. I looked at her until she flushed crimson and turned away. I read her thoughts. They were worth reading.

She and Brad went off toward the spaceport, walking close together, back to the Queen of Jupiter, and I stumbled over the dead Martian at my feet.

The pinched grayness had crawled in over his face. His green eyes were glazed and already sunken, and his blood was turning dark on the stones. Just another corpse.

I laughed. I put my black boot under the twist of his back and pushed him off into the sullen, red-brown water, and I laughed because my own blood was still hot and beating in me so hard it hurt.

He was dead, so I let him go.

I smiled at the splash and the fading ripples. "She was wrong," I thought. "It isn't Jay. It's just plain J. Goat. J for Judas."

THREE were about ten Mars hours to kill before the Queen blasted off. I had a good run at the getak tables in Madam Kan's. She found me some special desert-cactus brandy and a Venusian girl with a hide like polished emerald and golden eyes.

She danced for me, and she knew how. It wasn't a bad ten hours, for a Jekkara dive.

Missy, the dead Martian, and the girl named Virgie went down in my subconscious where they belonged, and didn't leave even a ripple. Things like that are like the pain of an old wound when you twist it. They get you for a minute, but they don't last. They aren't important any more.

Things can change. You planet-bound people build your four little walls of thought

and roof them in with convention, and you think there's nothing else. But space is big, and there are other worlds, and other ways. You can learn them. Even you. Try it, and see.

I finished the fiery green brandy. I filled the hollow between the Venusian dancer's emerald breasts with Martian silver and kissed her, and went away with a faint taste of fish on my lips, back toward the spaceport.

I walked. It was night, with a thin, cold wind rustling the sand and the low moons spilling silver and wild black shadows across the dunes. I could see my aura glowing, pale gold against the silver.

I felt swell. The only thing I thought about concerning the Queen of Jupiter was that pretty soon my job would be finished and I'd be paid.

I stretched with a pleasure you wouldn't know anything about, and it was a wonderful thing to be alive.

It was lonely out there on the moonswept desert a mile from the spaceport, when Gallery stepped out from behind a ruined tower that might have been a lighthouse once, when the desert was a sea.

Gallery was king-snipe of the glory hole. He was Black Irish, and moderately drunk, and his extra-sensory perception was quivering in him like a sensitive diaphragm. I knew he could see my aura. Very faintly, and not with his eyes, but enough. I knew he had seen it the first time he met me, when I signed aboard the Queen of Jupiter on Venus.

You meet them like that occasionally. Celts especially, and Romanies, both Earth and Martian, and a couple of tribes of Venusians. Extra-sensory perception is born into them. Mostly it's crude, but it can get in your way.

It was in my way now. Gallery had four inches on me, and about thirty pounds, and the whisky he'd drunk was just enough to make him fast, mean, and dangerous. His fists were large.

"You ain't human," he said softly.

He was smiling. He might have been making love to me, with his smile and his beautiful soft voice. The sweat on his face made it look like polished wood in the moonlight.

"No, Gallery," I said. "Not any more. Not for a long time."

He swayed slightly, over his flexed knees. I could see his eyes. The blueness was washed out of them by the moonlight. There was only fear left, hard and shining.

His voice was still soft, still singing. "What are you, then? And what will you be wantin' with the ship?"

"Nothing with the ship, Gallery. Only with the people on her. And as to what I am, what difference does it make?"

"None," said Gallery. "None. Because I'm going to kill you, now."

I laughed, not making any sound.

He nodded his black head slowly. "Show me your teeth, if you will. You'll be showin' them to the desert sky soon, out of a picked skull."

He opened his hands. The racing moonlight showed me a silver crucifix in each of his palms.

"No, Gallery," I said softly. "Maybe you could call me a vampire, but I'm not that kind."

He closed his hands again over the crosses and started forward, one slow step at a time. I could hear his boots in the blowing sand. I didn't move.

"You can't kill me, Gallery."

He didn't stop. He didn't speak. The sweat was trickling down his skin. He was afraid, but he didn't stop.

"You'll die here, Gallery, without a priest."

He didn't stop.

"Go on to the town, Gallery. Hide there till the Queen's gone. You'll be safe. Do you love the others enough to die for them?"

He stopped, then. He frowned, like a puzzled kid. It was a new thought.

I got the answer before he said it.

"What does love have to do with it? They're people."

He came on again, and I opened my eyes, wide.

"Gallery," I said.

HE WAS close. Close enough to smell the raw whisky on his breath. I looked up into his face. I caught his eyes and held them, and he stopped, slowly, dragging his feet as though all of a sudden there were weights on them.

I held his eyes. I could hear his thoughts. They were the same. They're always the same.

He raised his fists up, too slowly, as though he might be lifting a man's weight on each of them. His lips drew back. I could see the wet shine of his teeth and hear the labored breath go between them, hoarse and rough.

I smiled at him, and held his eyes with mine.

He went down to his knees. Inch by inch,

fighting me, but down. A big man with sweat on his face and blue eyes that couldn't look away. His hands opened. The silver crosses fell out and lay there glittering on the sand.

His head went back. The cords roped out in his neck and jerked, and then suddenly he fell over on his side and lay still.

"My heart," he whispered. "You've stopped it."

That's the only way. What they feel about us is instinct, and even psycho-surgery won't touch that. Besides, there's never time.

He couldn't breathe, now. He couldn't speak, but I heard his thoughts. I picked the crucifixes out of the sand and folded his fingers over them.

He managed to turn his head a little and look at me. He tried to speak, but again it was his thought I answered.

"Into the Veil, Gallery," I whispered. "That's where I'm leading the Queen."

I saw his eyes widen and fix. The last thought he had was—well, never mind that. I dragged him back into the ruined tower where no one would be likely to find him for a long time, and started on again for the spaceport. And then I stopped.

He'd dropped the crosses again. They were lying in the path with the moonlight on them, and I picked them up, thinking I'd throw them out into the blowing sand where they wouldn't be seen.

I didn't. I stood holding them. They didn't burn my flesh. I laughed.

Yeah. I laughed. But I couldn't look at them.

I went back in the tower and stretched Gallery on his back with his hands crossed on his chest, and closed his eyes. I laid a crucifix on each of his eyelids and went out, this time for good.

Shirina said once that you could never understand a human mind completely no matter how well you knew it. That's where the suffering comes in. You feel fine, everything's beautiful, and then all of a sudden a trapdoor comes open somewhere in your brain, and you remember.

Not often, and you learn to kick them shut, fast. But even so, Flack is the only one of us that still has dark hair, and he never had a soul to begin with.

Well, I kicked the door shut on Gallery and his crosses, and half an hour later the Queen of Jupiter blasted off for the Jovian colonies, and a landing she was never going to make.

CHAPTER II

Voyage into Doom

NOTHING happened until we hit the outer fringe of the Asteroid Belt. I'd kept watch on the minds of my crewmates, and I knew Gallery hadn't mentioned me to anyone else. You don't go around telling people that the guy in the next bunk gives off a yellow glow and isn't human, unless you want to wind up in a straitjacket. Especially when such things are something you sense but can't see, like electricity.

When we came into the danger zone inside the Belt, they set the precautionary watches at the emergency locks on the passenger decks, and I was assigned to one of them. I went up to take my station.

Just at the top of the companionway I felt the first faint reaction of my skin, and my aura began to pulse and brighten.

I went on to the Number Two lock and sat down.

I hadn't been on the passenger deck before. The Queen of Jupiter was an old tub from the Triangle trade, refitted for deep-space hauling. She held together, and that's all. She was carrying a heavy cargo of food, seed, clothing, and farm supplies, and about five hundred families trying for a fresh start in the Jovian colonies.

I remembered the first time I saw Jupiter. The first time any man from Earth ever saw Jupiter. That was long ago.

Now the deck was jammed. Men, women, kids, mattresses, bags, bundles, and what have you. Martians, Venusians, Terrans, all piled in together, making a howling racket and smelling very high in the combined heat of the sun and the press of bodies.

My skin was tingling and beginning to crawl. My aura was brighter.

I saw the girl. The girl named Virgie with her thick red hair and her colt's way of moving. She and her husband were minding a wiry, green-eyed Martian baby while its mother tried to sleep, and they were both thinking the same thing.

"Maybe, some day when things are better, we'll have one of our own."

I remember thinking that Missy would have looked like that holding our kid, if we'd ever had one.

My aura pulsed and glowed.

I watched the little worlds flash by, still far ahead of the ship, all sizes, from pebbles

to habitable planetoids, glittering in the raw sunlight and black as space on their shadow sides. People crowded up around the ports, and I got to looking at one old man standing almost beside me.

He had space stamped all over him, in the way he carried his lean frame and the lines in his leathery face, and the hungry-hound look of his eyes watching the Belt. An old rocket-hustler who had done plenty in his day, and remembered it all.

And then Virgie came up. Of all the women on deck it had to be Virgie. Brad was with her, and she was still holding the baby. She had her back to me, looking out.

"It's wonderful," she said softly. "Oh, Brad, just look at it!"

"Wonderful, and deadly," the old space-man said to himself. He looked around and smiled at Virgie. "Your first trip out?"

"Yes, for both of us. I suppose we're very starry-eyed about it, but it's strange." She made a little helpless gesture.

"I know. There aren't any words for it." He turned back to the port. His voice and his face were blank, but I could read his mind.

"I used to kick the supply ships through to the first settlement, fifty years ago," he said. "There were ten of us, doing that. I'm the only one left."

"The Belt was dangerous then, before they got the Rosson deflectors," Brad said.

"The Belt," said the old man softly, "only got three of them."

Virgie lifted her red head. "Then what . . . ?"

The old man didn't hear her. His thoughts were way off.

"Six of the best men in space, and then, eleven years ago, my son," he said, to no one.

A woman standing beside him turned her head. I saw the wide, raw shine of terror in her eyes, and the sudden stiffness of her lips.

"The Veil?" she whispered. "That's what you mean, isn't it? The Veil?"

The old man tried to shut her up, but Virgie broke in.

"What about the Veil?" she asked. "I've heard of it, vaguely. What is it?"

The Martian baby was absorbed in a silver chain she wore around her neck. I remember thinking it looked familiar. Probably she'd had it on the first time I saw her. My aura glowed, a hot bright gold.

THE woman's voice, answering, had an eerie quality of distance in it, like an echo. She was staring out of the port now.

"Nobody knows," she said. "It can't be found, or traced, or tested at all. My brother is a spaceman. He saw it once from a great distance, reaching from nowhere to swallow a ship. A veil of light. It faded, and the ship was gone! My brother saw it out here, close to the Belt."

"There's no more reason to expect it here than anywhere," the old spaceman said roughly. "It's taken ships as far in as Earth's orbit. There's no reason to be afraid."

My aura burned around me like a cloud of golden light, and my skin was alive with a subtle current.

The green-eyed Martian baby yanked the silver chain suddenly and crowed, holding its hands high. The thing on the end of the chain, that had been hidden under Virgie's dress, spun slowly 'round and 'round, and drew my eyes, and held them.

I must have made some sound, because Virgie looked around and saw me. I don't know what she thought. I didn't know anything for a long time, except that I was cold, as though some of the dead, black space outside had come in through the port somehow and touched me.

The shiny thing spun on the end of the silver chain, and the green-eyed baby watched it, and I watched it.

After that there was darkness, with me standing in the middle of it quite still, and cold, cold, cold!

Virgie's voice came through the darkness, calm, casual, as though none of it mattered at all.

"I've remembered who it is you made me think of, Mr. Goat," she said. "I'm afraid I was rather rude that day on Mars, but the resemblance puzzled me. Look."

A white object came into my shell of ice and blackness. It was a strong white hand, reddened across the knuckles with work, holding something in the palm. Something that burned with a clear, terrible light of its own. Her voice went on, so very quietly.

"This locket, Mr. Goat. It's ancient. Over three hundred years old. It belonged to an ancestor of mine, and the family has kept it ever since. It's rather a lovely story. She married a young spaceman. In those days, of course, space flight was still new and dangerous, and this young man loved it as much as he did his wife. His name was Stephen Vance. That's his picture. That's why I thought I had seen you somewhere before, and why I asked your name. I think the resemblance is quite striking, don't you?"

"Yes," I said. "Yes, it is."

"The girl is his wife, and of course, the original owner of the locket. He called her Missy. It's engraved on the back of the locket. Anyway, he had a chance to make the first flight from Mars to Jupiter, and Missy knew how much it meant to him. She knew that something of him would die if he didn't go, and so she let him. He didn't know how soon the baby they'd both wanted so much would arrive, for she didn't tell him that. Because she knew he wouldn't go if she did."

"So Stephen had two lockets made, this one and another just like it. He told her they'd make a link between them, he and Missy, that nothing could break. Sometime, somehow, he'd come back to her, no matter what happened. Then he went to Jupiter. He died there. His ship was never found.

"But Missy went on wearing the locket and praying. And when she died she gave it to her daughter. It grew into a sort of family tradition. That's why I have it now."

Her voice trailed off, drowsily, with a faint note of surprise. Her hand and the locket went away, and there was a great stillness all around me, a great peace.

I brought my arms up across my face. I stiffened, and I tried to say something, words I used to say a long, long time ago. They wouldn't come. They won't, when you go into the Beyond Place.

I took my hands away, and I could see again. I didn't touch the locket around my neck. I could feel it against my breast, like the cold of space, searing me.

Virgie lay at my feet. She still held the baby in the bend of one arm. Its round brown face was turned to hers, smiling a little. Brad lay beside them, with one arm flung across them both.

The locket lay on the gentle curve of Virgie's breast, face up, still open, rising and falling slowly to the lift of her breathing.

They don't suffer. Remember that. They don't suffer. They don't even know. They sleep, and their dreams are happy. Remember, please! Not one of them has suffered, or been afraid.

I STOOD alone in that silent ship. There were no stars beyond the port now, no little worlds riding the Belt. There was only a veil of light wrapped close around the ship, a soft web of green and purple and gold and blue spun on a shimmering gray woof that was not color at all, and held there with threads of scarlet.

There was the familiar dimming of the electrics inside the ship. The people slept on the broad deck. I could hear their breathing, soft and slow and peaceful. My aura burned like a golden cloud around me, and inside it my body beat and pulsed with life.

I looked down at the locket, at Missy's face. If you'd told me. Oh Missy, if you'd only told me, I could have saved you!

Virgie's red hair, dark and straight and heavy in her white neck. Virgie's smoke-gray eyes, half open and dreaming. Missy's hair. Missy's eyes.

Mine. Part of my flesh, part of my bone, part of my blood. Part of the life that still beat and pulsed inside me.

Three hundred years.

"Oh, if I could only pray!" I thought.

I knelt down beside her. I put out my hand. The golden light came out of the flesh and veiled her face. I took my hand away and got up, slowly. More slowly than Gallery fell when he died.

The shimmer of the Veil was all through the ship, now. In the air, in every atom of its wood and metal. I moved in it, a shining golden thing, alive and young, in a silent, sleeping world.

Three hundred years, and Missy was dead, and now the locket had brought her back.

Did Judas feel like this when the rope tore the life out of him?

But Judas died.

I walked in the silence, wrapped in my golden cloud, and my heartbeats shook me like the blows of a man's fist. A strong heart. A young, strong heart.

The ship swerved slowly, drawn out of its arc of free fall toward Jupiter. The auxiliaries had not been cut in yet for the Belt. The Veil just closed around the hull and drew it, easily.

It's just an application of will-power. Teleportation, the strength of mind and thought amplified by the X-crystals and directed like a radio beam. The release of energy between the force of thought and the force of gravity causes the light, the visible thing that spacemen call the Veil. The hypnotic sleep-impulse is sent the same way, through the X-crystals on Astellar.

Shirina says it's a simple thing, a child's trick, in its own space-time matrix. All it requires is a focal point to guide it, a special vibration it can follow like a torch in the void, such as the aura around flesh, human or not, that has bathed in the Cloud.

A Judas goat, to lead the sheep to slaughter.

I walked in my golden light. The pleasure of subtle energies pricked and flared across my skin. I was going home.

And Missy was still alive. Three hundred years, and she was still alive. Her blood and mine, alive together in a girl named Virgie.

And I was taking her to Astellar, the world its own dimension didn't want.

I guess it was the stopping of the current across my skin that roused me, half an eternity later. My aura had paled to its normal faintness. I heard the faint grating ring of metal on stone, and I knew the Queen of Jupiter had made her last landing. I was home.

I was sitting on the edge of my own bunk. I didn't know how I got there. I was holding my head on my clenched fists, and when I opened them my own locket fell out. There was blood on my palms.

I got up and walked through the silence, through the hard impersonal glare of the electrics, to the nearest airlock, and went out.

The Queen of Jupiter lay in a rounded cradle of rock, worn smooth. Back at the top of the chute the space doors were closed, and the last echo of the air pumps was dying away against the low roof of the cavern. The rock is a pale translucent green, carved and polished into beauty that stabs you breathless, no matter how many times you see it.

Astellar is a little world, only about half the size of Vesta. Outside it's nothing but black slag, without even a trace of mineral to attract a tramp miner. When they want to they can bend the light around it so that the finest spacescope can't find it, and the same thought-force that makes the Veil can move Astellar where they wish it to go.

SINCE traffic through the Belt has grown fairly heavy, they haven't moved it much. They haven't had to.

I went across the cavern in the pale green light. There's a wide ramp that goes up from the floor like the sweep of an angel's wing. Flack was waiting for me near the foot of it, outlined in the faint gold of his aura.

"Hi, Steve," he said, and looked at the Queen of Jupiter with his queer gray eyes. His hair was as black as mine used to be, his skin space-burned dark and leathery. His eyes looked out of the darkness like pale spots of moonlight, faintly luminous and without a soul.

I knew Flack before he became one of

us, and I thought then that he was less human than the Astellarians.

"A good haul this time, Steve?" he asked.

"Yeah." I tried to get past him. He caught my arm.

"Hey—what's eating you?" he said.

"Nothing."

I shook him off. He smiled and stepped in front of me. A big man, as big as Gallery and a lot tougher, with a mind that could meet mine on an equal footing.

"Don't give me that, Stevie. Something's—he-ey!" He pushed my chin up suddenly, and his pale eyes glowed and narrowed.

"What's this?" he said. "Tears?"

He stared at me a minute, slack-jawed, and then he began to laugh. I hit him.

CHAPTER III

Wages of Evil

FLACK went sprawling backward onto the lucent stone. I went by him up the curve of the ramp. I went fast, but it was already too late.

The airlocks of the Queen of Jupiter opened behind me.

I stopped. I stopped the way Gallery did in the blowing Martian sand, slowly, dragging weights on my feet. I didn't want to. I didn't want to turn around, but there was nothing I could do about it. My body turned, by itself.

Flack was on his feet again, leaning up against the carved green wall, looking at me. Blood ran out over his lip and down his chin. He got out a handkerchief and held it over his mouth, and his eyes never left me, pale and still and glowing. The golden aura made a halo round his dark head, like the painting of a saint.

Beyond him the locks of the ship were open, and the people were coming out.

In their niche on the fourth level of Astellar the X-crystals were pulsing from pale gray to a black as endless and alien as the Coal Sack. Behind them was a mind, kindly and gentle, thinking, and the human cargo of the Queen heard its thoughts.

They came out of the locks, walking steadily but without haste. They formed into a loose column and came across the green translucent floor of the cavern and up the ramp. Walking easily, their breathing deep and quiet, their eyes half open and full of dreams.

Up the long sweeping ribbon of pale green stone, past Flack, past me, and into the hall beyond. They didn't see anything but their dreams. They smiled a little. They were happy, and not afraid.

Virgie still carried the baby, drowsing in her arms, and Brad was still beside her. The locket had turned with her movements, hiding the pictures, showing me only its silver back.

I watched them go. The hall beyond the ramp was gem-cut from milky crystal and inlaid with metals that came from another dimension, radioactive metals that filled the crystal walls and the air between them with softened, misty fire.

They went slowly into the veil of mist and fire, and were gone.

Flack spoke softly. "Steve."

I turned back toward the sound of his voice. There was a strange blur over everything, but I could see the yellow glow of his aura, the dark strength of him outlined against the pale green rock. He hadn't moved. He hadn't taken his cold light eyes away from me.

I had left my mind naked, unguarded, and I knew before he spoke that Flack had read it.

He spoke through his bruised lips.

"You're thinking you won't go into the Cloud again, because of that girl," he whispered. "You're thinking there must be some way to save her. But there isn't, and you wouldn't save her if you could. And you'll go into the Cloud again, Stevie. Twelve hours from now, when it's time, you'll walk into the Cloud with the rest of us. And do you know why?"

His voice grew soft as the touch of a dove, with a sound of laughter under it.

"Because you're afraid to die, Stevie, just like the rest of us. Even me, Flack, the guy that never had a soul. I never believed in any God but myself and I love life. But sometimes I look at a corpse lying in the street of some human sink-hole and curse it with all my heart because it didn't have to be afraid.

"You'll go into the Cloud, because the Cloud is all that keeps you alive. And you won't care about the red-haired girl, Stevie. You wouldn't care if it was Missy herself giving her life to you, because you're afraid. We're not human any longer. Steve. We're gone beyond. We've sinned—sins there aren't even any names for in this dimension. And no matter what we believe in, or deny, we're afraid.

"Afraid to die, Stevie. All of us. Afraid to die!"

His words frightened me. I couldn't forget them. I was remembering them even when I saw Shirina.

"I've found a new dimension, Stevie," Shirina said lazily. "A little one, between the Eighth and Ninth. It's so little we missed it before. We'll explore it, after the Cloud."

She led me in our favorite room. It was cut from a crystal so black and deep that it was like being in outer space, and if you looked long enough you could see strange nebulæ, far off, and galaxies that never were except in dreams.

"How long before it's time?" I asked her.

"An hour, perhaps less. Poor Stevie. It'll be over soon, and you'll forget."

HER MIND touched mine gently, with an intimate sweetness and comfort far beyond the touch of hands. She'd been doing that for hours, soothing the fever and the pain out of my thoughts. I lay without moving, sprawled on a couch so soft it was like a cloud. I could see the glow and shimmer of Shirina against the darkness without turning my head.

I don't know how to describe Shirina. Physically she was close enough to humanity. The differences in structure were more subtle than mere shape. They were—well, they were right, and exotic, and beautiful in a way there aren't any words for.

She, and her race, had no need of clothing. Their lazy, sinuous bodies had a fleecy covering that wasn't fur or feathers or tendrils but something of all three. They had no true color. They changed according to light, in an endless spectrum of loveliness that went far beyond the range you humans know.

Now, in the dark, Shirina's aura glowed like warm pearl. I could see her face, faintly, the queer peaked triangular bones covered with skin softer than a humming-bird's breast, the dead-black, bottomless eyes, the crest of delicate antennæ tipped with tiny balls of light like diamonds burning under gauze.

Her thoughts clung around me gently. "There's no need to worry, Stevie," she was thinking. "The girl will go last. It's all arranged. You will enter the Cloud first of all, and there won't be the smallest vibration of her to touch you."

"But she'll touch somebody, Shirina," I groaned. "And it makes it all different, somehow, even with the others. Time doesn't

seem to mean much. She's—she's like my own kid."

Shirina answered aloud, patiently. "But she isn't. Your daughter was born three hundred years ago. Three hundred years, that is, for your body. For you there isn't any reckoning. Time is different in every dimension. We've spent a thousand years in some of them, and more than that."

Yes. I could remember those alien years. Dimensional walls are no barrier to thought. You lie under the X-crystals and watch them pulse from mist-gray to depthless black. Your mind is sucked out of you and projected along a tight beam of carefully planned vibration, and presently you're in another space, another time.

You can take over any body that pleases you, for as long as you want. You can go between planets, between suns, between galaxies, just by thinking about it. You can see things, do things, taste experiences that all the languages of our space-time continuum put together have no words for.

Shirina and I had done a lot of wandering, a lot of seeing, and a lot of tasting. And the interlocking universes are infinite.

"I can't help worrying, Shirina," I told her. "I don't want to feel like this, but I can't help it. Right now I'm human. Just plain Steve Vance of Beverly Hills, California, on the planet Earth. I can't bear my memories."

My throat closed up. I was sick, and covered with cold sweat, and closer to going crazy than ever before in all my Satan-knows-how-many years.

Shirina's voice came through the darkness. It was like a bird-call, a flute, a ripple of water over stones, and like nothing that any of you ever heard or ever will hear.

"Stevie," she said. "Listen to me. You're not human any more. You haven't been human since the first time you walked in the Cloud. You have no more contact with those people than they have with the beasts they raise for slaughter."

"But I can't help remembering."

"All right. Remember, then. Remember how from birth you were different from other men. How you had to go on and out, to see things no man had ever seen before, to fight space itself with your heart and your ship and your two hands."

I could recall it. The first man to dare the Belt, the first man to see Jupiter blazing in his swarm of moons.

"That's why, when we caught you in the Veil and brought you to Astellar, we saved

you from the Cloud. You had something rare—a strength, a sweep of vision and desire. You could give us something we wanted, an easier contact with human ships. And in return, we gave you life and freedom."

She paused, and added softly, "And myself, Stevie."

"Shirina!" A lot of things met and mingled in our thoughts. Emotions born of alien bodies we had shared. Memories of battle and beauty, of terror and love, under suns that never burned afterward, even in one's dreams. I can't explain it. There aren't any words.

"Shirina, help me!"

SHIRINA'S mind cradled mine like a mother's arms.

"You weren't to blame in the beginning, Stevie. We did it to you under hypnosis, so that your brain could assimilate the change gradually, without shock. I led you myself into our world, like someone leading a child, and when you were finally freed, much time had passed. You had gone beyond humanity. Far beyond."

"I could have stopped. I could have refused to go into the Cloud again, when I knew what it was. I could have refused to be a Judas goat, leading the sheep to slaughter."

"Then why didn't you?"

"Because I had what I wanted," I said slowly. "What I'd always wanted and never had a name for. Power and freedom such as no man ever had. I liked having it. When I thought about you and the things we could do together, and the things I could do alone, I'd have led the whole Solar System into the Veil, and be hanged to it."

I drew a harsh, tight breath and wiped the sweat from my palms.

"And besides, I didn't feel human any longer. I wouldn't hurt them any more than I'd have mistreated a dog when I was still a man. But I didn't belong to them any more."

"Then why is it different now?"

"I don't know. It just is. When I think of Virgie going under the crystals, and me walking in the Cloud, it's too much."

"You've seen their bodies, afterward," Shirina said gently. "Not one atom is touched or changed, and they smile. There's no easier or kinder death in Creation."

"I know," I said. "I know. But Virgie is my own."

She'd walk under the X-crystals, smiling, with her red hair dark and shining and her

smoke-gray eyes half open and full of dreams. She'd still have the baby in her arms, and Brad would walk beside her. And the X-crystals would pulse and burn with black strange fires, and she would lie down, still smiling, and that would be all.

All, forever, for Virgie and Brad and the green-eyed Martian baby.

But the life that had been in their bodies, the force that no man has a name for that makes the breath and blood and heat of living flesh, the ultimate vibration of the human soul—that life-force would rise up from the crystals, up into the chamber of the Cloud. And Shirina, and Shirina's people, and the four other men like me that weren't human any longer, would walk in it so that we could live.

It hadn't really hit me before. It doesn't. You think of it at first, but it doesn't mean anything. There's no semantic referent for "soul" or "ego" or "life force." You don't see anything, you don't have any contact with the dead. You don't even think much of death.

All you know is you walk into a radiant Cloud, and you feel like a God, and you don't think of the human side of it because you aren't human any longer.

"No wonder they threw you out of your own dimension!" I cried out.

Shirina sighed. "They called us vampires; parasites—sybaritic monsters who lived only for sensation and pleasure. And they cast us into darkness. Well, perhaps they were right. I don't know. But we never hurt or frightened anyone, and when I think of the things they did to their own people, in blood and fear and hate, I'm terrified."

She rose and came and stood over me, glowing like warm pearl against the space-deep crystal. The tiny tips of diamond fire burned on her antennae, and her eyes were like black stars.

I put out my hands to her. She took them, and her touch broke down my control. I was crying suddenly, not making any sound.

"Right or wrong, Stevie, you're one of us now," she said gently. "I'm sorry this happened. I would have spared you, if you'd let me put your mind to sleep until it was over. But you've got to understand that. You left them, the humans, behind you, and you can never, never go back."

After a long time I spoke. "I know, I understand."

I felt her sigh and shiver, and then she drew back, still holding my hands.

"It's time now, Stevie."

I got up, slowly, and then I stopped. Shirina caught her breath suddenly.

"Steve, my hands! You're hurting me!"

I let them go. "Flack," I said, not talking to anybody. "He knew my weakness. At root and base, no matter how much I talk, I'm going into the Cloud again because I'm afraid. That's why I'll always go into the Cloud when it's time. Because I've sinned so deeply I'm afraid to die."

"What is sin?" Shirina whispered.

"God knows. God only knows."

I brought her bird-soft body into my arms and kissed her, brushing my lips across the shining down of her cheek to her little crimson mouth. There was the faint, bitter taste of my tears in the kiss, and then I laughed, softly.

I pulled the chain and locket from around my neck and dropped them on the floor, and we went out together, to the Cloud.

CHAPTER IV

Curtain of Darkness

WE WALKED through the halls of Astellar, like people in the heart of a many-colored jewel. Halls of amber and amethyst and cinnabar, of dragon-green and gray the color of morning mist, and colors there are no names for in this dimension.

The others joined us, coming from the crystal cells where they spent their time. Shirina's people, velvet-eyed and gentle, with their crowns of fire-tipped antennae. They were like a living rainbow in the jewel-light of the halls.

Flack and myself and the three others—only five men, in all the time Astellar had been in our dimension, with the kind of minds Shirina's people wanted—wore our spaceman's black, walking in our golden aura.

I saw Flack looking at me, but I didn't meet his eyes.

We came, finally, to the place of the Cloud, in the center of Astellar. The plain ebon-colored doors stood open. Beyond them there was a mist like curdled sunshine, motes of pure, bright, gilded radiance, coiling and dancing in a cloud of living light.

Shirina took my hand. I knew she wanted to keep me from thinking about the place below, where still through hypnotic command the men and women and children from the Queen of Jupiter were walking under the

X-crystals to their last long sleep.

I held her, tightly, and we stepped through into the Cloud.

The light closed us in. We walked on something that was not rock, nor anything tangible, but a vibration of force from the X-crystals that held us on a tingling, buoyant web. And the golden, living light clung to us, caressing, spilling over the skin in tiny rippling waves of fire.

I was hungry for it. My body stretched, lifting up. I walked on the vibrant web of power under my feet, my head up, the breath stopped in my throat, every separate atom of my flesh rejuvenated, throbbing and blazing and pulsing with life.

Life!

And then it hit me.

I didn't want it to. I thought I had it down, down for good where it couldn't bother me any more. I thought I'd made my peace with whatever soul I'd had, or lost. I didn't want to think.

But I did. It struck me, suddenly. Like a meteor crashing a ship in space, like the first naked blaze of the sun when you clear the Darkside peaks of Mercury. Like death, the ultimate, final thing you can't dodge or get around.

I knew what that life was and where it came from, and how it had changed me.

It was Virgie. Virgie with her blasted red hair and her smoke-gray eyes, and Missy's life in her, and mine. Why did she have to be sent? Why did I have to meet her beside that dead Martian, on the Jekkara Low-Canal?

But I had met her. And suddenly I knew. I knew!

I don't remember what I did. I must have wrenched loose from Shirina's hand. I felt her startled thought touch my brain, and then it broke away and I was running through the golden Cloud, toward the exit beyond. Running without control, running at top speed.

I think I tried to scream. I don't know. I was clean crazy. But I can remember even then that I sensed somebody running beside me, pacing me through the brilliant blindness of the Cloud.

I plunged out into the hall beyond. It was blue like still deep water, and empty. I ran. I didn't want to run. Some sane corner of my mind cried out to Shirina for help, but she couldn't get through the shrieking chaos of the rest of it. I ran.

And somebody ran behind me. I didn't turn around. I didn't care. I hardly knew

it. But somebody ran behind me, on long fleet legs.

Down the blue hall, and into another one that was all flame-color shot with gray, and down that to a curving ramp cut from dark amber that dropped to the level below.

The level where the X-crystals were.

I rushed down the amber path, bounding like a stag with the hounds close behind, through a crystal silence that threw the sound of my breathing back at me, harsh and tearing. There was a circular place at the bottom of the ramp where four hallways met, a place jewel-carved in sombre, depthless purple.

I came into it, and from three of the hall mouths men stepped out to meet me. Men with young faces and snow-white hair, and naked bodies burning gold against the purple.

I stopped in the center of the floor. I heard bare feet racing on the ramp behind me, and I knew without looking who it was.

FLACK. He circled and fixed me with his cold strange eyes, like moonlight in his dark face. Somewhere he had found a blaster.

He held it on me. Not on my head or heart, but at my middle.

"I thought you might blow your top, Stevie," he said. "So we kind of stood by, in case you'd try something."

I stood still. I didn't have any feelings. I was beyond that. I was crazy—clean, stark crazy, thinking of time and the crystals pulsing just beyond my reach.

"Get out of my way," I warned him.

Flack smiled. There was no humor in it. The three men moved in a little behind him. They looked at Flack and they looked at me, and they didn't like any of it, but they were afraid.

Afraid to die, like all of us. Even Flack, who never had a soul.

Flack acted like someone being patient with a naughty child.

"Will you come back with us, Stevie, or do I blow your insides out, here and now?" he asked me.

I looked at his cold, queer eyes. "You'd like that."

"Yeah." He ran the red tip of his tongue over his swollen lips. "Yeah. But I'm letting you choose."

"All right," I said. "All right, I'll choose."

I was crazy. I jumped him.

I hit him first with my mind. Flack was strong, but I was fifty years older in the Cloud than he was, and Shirina had taught

me things. I gathered all the force I had and let him have it, and he had to marshal his own thought-force to fight it off, so that for a second he couldn't manage the blaster with his conscious mind.

Instinctive reflex sent a crimson stream of deadly power smoking past me when I dived in low. It seared my skin, but that was all.

We fell, threshing, on the purple stone. Flack was strong. He was bigger than I, and heavier, and viciously mean. He beat most of the sense out of me, but I had caught his gun wrist and wouldn't let go. The three others took their golden auras back a little toward the hall mouths, afraid the blaster might let off and hit them.

They thought Flack could handle me, and they were afraid. So they drew back and used their minds on me, trying to hammer me down.

I don't know yet why they couldn't. I guess it was because of a lot of things, Shirina's teaching, my greater age, and the fact that I wasn't thinking consciously of anything. I was just a thing that had started some place and was going through.

Sometimes I wish they had broken me. Sometimes I wish Flack had burned me down on the purple stone.

I shook off their thought-blows. I took the pounding of Flack's big fist and the savaging of his feet and knees, and put all my strength into bending his arm. I yanked it away from me, and up and around where I wanted it.

I got it there. He made his last play. He broke his heart on it, and it didn't do him any good. I saw his eyes, stretched wide in his dark face. I can still see them.

I got my finger past his and pressed the firing stud.

I got up and walked across the floor, carrying the blaster. The three others spread out, warily, ringing me. Naked men glowing gold against the purple stone, their eyes hard, animal-bright with fear.

I blasted one through the head just as his muscles tensed for the leap. The others came in, fast. They knocked me down, and time was passing, and the people walking slowly under the crystals with dreams in their eyes.

I kicked one man under the jaw and broke his neck, and the other tried to take the gun away. I had just come from the Cloud, and he hadn't. I was strong with the life that pulsed up from the X-crystals. I forced his arms back and pressed the stud again, trying not to see his eyes.

And these were my friends. Men I drank and laughed with, and went with sometimes to worlds beyond this universe.

I went on, down a hall the color of a Martian dawn. I was empty. I didn't feel or think. There was a pain a long way off, and blood in my mouth, but such things didn't matter.

I came to the place where the crystals were and stopped.

A LOT of them had walked under the crystals. Almost half of the five hundred families from the Queen of Jupiter. They lay still on the black floor, and there was plenty of room. They didn't crowd the others coming after them, a slow, quiet stream of human beings with dreams in their eyes.

The crystals hung in a wide circle, tilting slightly inward. They pulsed with a blackness that was beyond mere dark, a negative thing as blazing and tangible as sunlight. The angle of tilt and the tuning of the facets against one another made the difference in the result, whether projecting the Veil, or motive power, or hypnosis, or serving as a gateway to another time and space.

Or sucked the power of life from human bodies.

I could see the pale shimmer of force in the center, a sort of vortex between the limitless, burning, black facets that rose from the quiet bodies to the chamber of the Cloud above.

I could see the faces of the dead. They were still smiling.

The controls were on the other side. I ran. I was dead inside, as dead as the corpses on the floor, but I ran. I remember thinking it was funny to run when you were dead. I kept on the outside of the crystals and ran with all my strength to the controls.

I saw Virgie. She was way back in the procession, and she was just as I knew she'd be, with Brad beside her and the green-eyed baby still in her arms, asleep.

Virgie, with her gleaming red hair and Missy's eyes!

I grabbed the controls and wrenches them over, and the shimmering vortex disappeared. I spun the great hexagonal wheel and notched it for full-power hypnosis, and ran out onto the floor, among the dead.

I told the living what to do. I didn't waken them. They turned and went back the way they came, back toward the Queen of Jupiter, running hard and still smiling, still not afraid.

I went back to the wheel and turned it again, to a notch marked in their danger-color, and then I followed the last of the humans into the hall. At the doorway I turned and raised my blaster.

I saw Shirina standing under the radiant blackness of the crystals, halfway around the curving wall.

I felt her mind touch mine, and then draw back, slowly, the way you take your hand away from someone you loved that has just died. I looked at her eyes. I had to.

Why did I do what I did? What did I care about red hair and smoke-gray eyes, and the three-hundred-year diluted blood of a girl named Missy? I wasn't human any longer. What did I care?

We were apart, Shirina and I. We had gone away from each other and we couldn't touch, even to say goodbye. I caught a faint echo of her thought.

"Oh, Stevie, there were still so many things to do!"

Her great luminous black eyes shining with tears, her jewel-tipped antennae dulled and drooping. And yet I knew what she was going to do.

I couldn't see the crystals, suddenly. I couldn't see anything. I knew there was never going to be anything I wanted to see again. I raised the blaster and fired it full power into one of the hanging crystals, and then I ran.

I felt the bolt of Shirina's lethal thought strike my brain, and weaken, and shatter on something in her own mind, at its source. I ran, a dead thing going on leaden feet, in a halo of golden light.

Behind me the X-crystals, upset by the blaster in their fullest sympathy of power, began to split and crack and tear the world of Astellar to bits.

I don't know much about what happened. I ran and ran, on the heels of the humans who still lived, but I was beyond thinking or feeling. I have vague memories of hallways lined with cells of jewel-toned crystal, halls of amber and amethyst and cinnabar, of dragon-green and gray the color of morning mist, and colors there are no names for in this dimension.

Hallways that cracked and split behind me, falling in upon themselves, shards of broken rainbows. And above that the scream of power from the X-crystals, wrenching and tearing at Astellar.

Then something I heard with my mind, and not my ears. Shirina's people, dying in the wreckage.

My mind was stunned, but not stunned enough. I could still hear. I can still hear.

The Queen of Jupiter was safe. The outward-moving vibration hadn't reached her yet. We got aboard her, and I opened the space doors and blasted her off myself, because the skipper and the first and second officers were asleep for good on Astellar.

I didn't watch the death of Astellar. Only after a long time I looked back, and it was gone, and there was only a cloud of bright dust shimmering in the raw sunlight.

I set the Iron Mike for Space Authority headquarters on Mars and turned on the automatic AC warning beam. Then I left the Queen of Jupiter in the Number 4 life-boat, B deck.

That's where I am now, writing this, somewhere between Mars and the Belt. I didn't see Virgie before I went. I didn't see any of them, but especially Virgie. They'll be awake now. I hope their lives are worth what they cost.

Astellar is gone. The Veil is gone. You don't have to be afraid any more. I'm going to put this manuscript in a message rocket and send it on, so you'll know you don't have to fear. I don't know why I care.

I don't know why I'm writing this at all, unless— Bosh, I know! Why lie? At this stage of the game, why lie?

I'm alive now. I'm a young man. But the Cloud that kept me that way is gone, and presently I shall grow old, too old, very quickly, and die. And I'm afraid to die.

Somewhere in the Solar System there

must be somebody willing to pray for me. They used to teach me, when I was a kid, that prayer helped. I want somebody to pray for my soul, because I can't do it for myself.

If I were glad of what I've done, if I had changed, perhaps then I could pray.

But I've gone beyond humanity, and I can't turn back.

Maybe prayer doesn't matter. Maybe there's nothing beyond death but oblivion. I hope so! If I could only stop being, stop thinking, stop remembering.

I hope to all the gods of all the universes that death is the end. But I don't know, and I'm afraid.

Afraid. Judas—Judas—Judas! I betrayed two worlds, and there couldn't be a hell deeper than the one I live in now. And still I'm afraid.

Why? Why should I care what happens to me? I destroyed Astellar. I destroyed Shirina, whom I loved better than anything in Creation. I destroyed my friends, my comrades—and I have destroyed myself.

And you're not worth it. Not all the human cattle that breed in the Solar System were worth Astellar, and Shirina, and the things we did beyond space and time, together.

Why did I give Missy that locket?

Why did I have to meet Virgie, with her red hair?

Why did I remember? Why did I care? Why did I do what I did?

Why was I ever born?

I USED TO
HATE THESE
BLACKOUTS!

THAT WAS
BEFORE I
DISCOVERED
STAR BLADES!



WONDERS OF WAR

The Role of Science in Combat on All Fronts



REMOTE-CONTROL GUNS REDUCE AIR-DRAGGING TURRETS ON BOMBERS

H. H. McCallister of Parkville, Maryland, has just patented a device which, by eliminating the gun turrets and blisters whose bulges interfere with bomber streamlining and cause air drag, will increase the speed of military aircraft.

Taking advantage of new remote-control mechanisms that permit "absentee" gunners to operate the pieces, thus reducing operation space materially, he has designed a flat-topped turret that lies flush with the surface of the fuselage until firepower is needed.

Then, by remote control, the turret can be raised the few inches necessary to bring its twin machine-guns to bear in any desired direction. The device offers tactical as well as engineering advantages for an apparently unarmed transport plane so equipped could suddenly sprout a dozen machine-guns as an enemy fighter closed in for an easy kill.

REPLACEABLE EYES FOR LAND BATTLESHIPS

A replaceable "eye" for armored vehicles has been invented by Colonel David J. Crawford, U.S.A. Few tanks nowadays have direct-view slits for observers. The risk of getting bullets or shell fragments through them is too great. Instead, periscope mirrors are provided. But if these are shattered, the tank is literally blind.

In Colonel Crawford's invention, the upper of the two periscope mirrors is massively mounted so that when it is turned for insertion of a new mirror it automatically closes the slit.

At the same time, means are provided to shake out any bullets or shell fragments that may have lodged in it. Thus a tank with a steel cinder in its eye no longer has to resort to surgery to get it out.

NEW SIGHT FOR RIFLE GRENADES—For more accurate lobbing of rifle grenades, R. O. Persinger of Marion, Ohio, has devised a simple sight easy to attach to the rifle. A horizontal sighting arm carries front and rear sights. Projecting downward from it is a graduated segment with a pointer to indicate the relatively high angles at which it is necessary to hold a rifle during grenade firing.

SHOCK ABSORBER EASES PARACHUTE JOLTS—To reduce the severe jolts received by parachute jumpers when the parachute opens, James H. Strong of Windsor, New York, has invented a harness in which strong elastic rubber straps or cords are incorporated as

part of the lift webs, which connect the harness proper with the parachute struts.

These are claimed to have sufficient stretch and rebound to ease the opening shock and thereby leave the user uninjured and ready for instant action on reaching the ground. Okay, if they don't make him bounce.

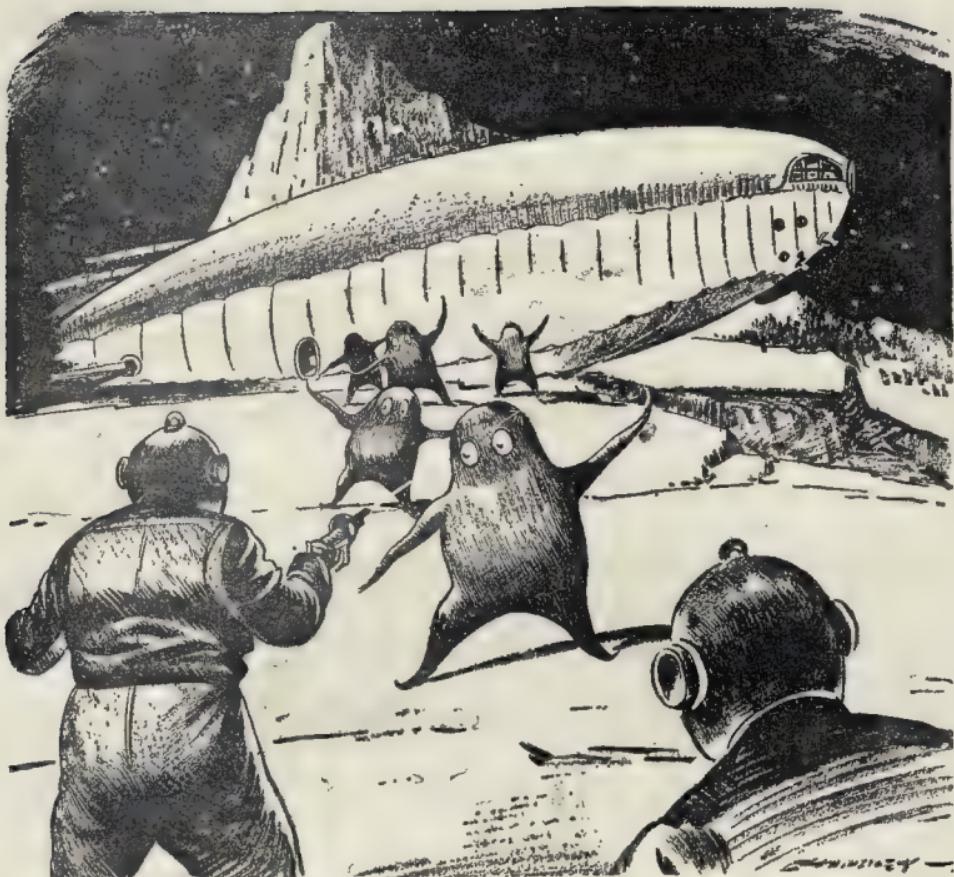
GARAND IMPROVES OWN GUN—John C. Garand of the Springfield Arsenal, inventor of the famed M-1 semi-automatic rifle now used by all our armed forces, has not stopped working on his famous weapon. His latest invention is an improved cartridge clip which will facilitate the already high rate of fire.

REAR VIEW MIRROR FOR PILOTS—A trick mirror that enables the pilot of a fighter plane to see at a single glance what is on his tail or overhead at an acute angle is the discovery of Leo H. Brown of New York City.

The pilot looks straight forward into a reflecting prism. This in turn is adjusted at a proper angle with relation to a second optical member, which is essentially a curved prism. The curved surfaces are so adjusted that they gather light rays from directly rearward to about halfway overhead and crowd the entire field into a single image in the prism before the pilot's eyes. But it doesn't see through the floor to tell him what's beneath.

TORPEDO DOUBLES AS DEPTH BOMB—A torpedo that can also function as a depth bomb has been patented by A. R. Ferrer of San Francisco. Its explosive head is detachable so that it can be set to release and sink to a suitable position before exploding if the target under attack is a crash-diving submarine. How the change could be effected before the sub had crash dived, its inventor fails to say. Sounds like a lot of work in the bomb bays.

DEADLY DUD—An incendiary bullet that is dangerous even when it fails to explode on time has been discovered by Joseph J. Hicks of Hays, Pennsylvania. The hollow bullet is filled with thermite and provided with a fuse intended to function on impact. If it fails to do so and the bullet is picked up by an enemy who tries to unscrew it to find out how it works, the fuse will function on being turned, causing a deadly explosion at close quarters. Moral—don't go around unscrewing strange spent bullets!



He snapped a shot at an Asterite who was trying to pull a surprise and run

JUKE BOX ASTEROID

By JOSEPH FARRELL

Held Prisoner by Swing-Happy Space Creatures, Steve Burgess Finds There's Plenty of Hep in a Twentieth Century Music Box Jive!

STEVE BURGESS gazed thoughtfully through the telescope in the nose of the little space freighter, studying the coffin-shaped asteroid a few miles away. He turned from the instrument as the other half of the two-man crew came in from amidships.

"Take a look, Pat," he advised. "Then get a pencil and paper and figure out the value in dollars of that chunk of iron."

Pat Kelley put an eye to the lens. The rocket-tender wore the greasy clothes of his profession, but with an added personal

touch. Among spacemen, he was famous for the brilliant red suspenders he always wore, and which he snapped proudly as he spoke.

"Looks like pure iron," he admitted. "But forget it. It would take capital—with capital letters—to haul that back to Earth. And don't forget we got a cargo, and a penalty job, at that."

"We're three days ahead of schedule," Burgess insisted. "Let's look it over. Maybe we can figure something easy."

Kelley grunted.

"Our chances of getting back to Earth with that iron aren't worth a plugged Martian nickel. In fact—" He produced a coin. "I'll give you mine right now. Catch!"

Grinning, Burgess plucked the coin from the air. He glanced at it, saw that it was indeed a plugged Martian nickel. He shoved it absently into his pocket.

"Let's go down anyway," he suggested. "Lower the landing mats."

As they descended, he looked over the rough surfaced asteroid, his eyes bright with thought. They should be able to figure a way to haul this back to Earth, short of using a fleet of tugs. The giant modern steel mills were ever hungry for more iron, and he and Kelley had found a fortune. If they could transport it to market.

He thought briefly of the cargo in the freighter's hold. Eight miles of telephone cable, bound for the research station on Ganymede. They were hauling it on a government penalty contract, but had time to spare.

The vessel settled smoothly on its caterpillar landing mat. A few minutes later the two men were standing in space suits on the black surface. Burgess kicked at a small outcropping and picked up a loosened piece of metal.

"Sure enough—it's just about pure iron. Pat, I thought I saw something over to the left as we came in. Let's walk over and find out."

They moved leisurely, confirming as they went that the ground beneath them was still of high-grade iron. Burgess tried vaguely to imagine a reason. Was this a natural freak? Or was it a cast-off of some ancient race of incredible giants?

"We ain't the first ones here," said Kelley.

Burgess looked disgustedly at the slender, tapering structure ahead. It was this building he had seen from space—obviously a power station, and of Venusian origin, at that. Silhouetted against the black of space, it vibrated visibly, throbbing with atomic life. There was power there. More than enough power for a small city.

"Score another for the Venusians," Burgess shrugged. "They've beat us to it. Let's get back to the job, Pat."

They trudged back to their freighter. But as they neared the vessel, they stopped to stare upward, where a blaze of something brighter than the stars lighted the sky. Rocket blasts. Their trained eyes identified the ship.

"Venusian," said Kelley.

The Venusian vessel plunged to a landing

alongside their own. The two men waited, and watched the crew of Venusians pour from the larger ship. It was the usual mixture of dwarfed natives and their leaders, the arrogant human colonists who ruled Venus.

The Venusians, like themselves, were heavily space-suited—native and human alike. But from the ship came a half dozen creatures who leaped joyfully over the airless surface without clothing of any kind.

"Asterites," said Burgess, in surprise. "What are they doing riding around in a spaceship?"

ONE of the Venusians, who appeared to be the leader, answered.

"These are our friends," he explained, via helmet radio. "You terrestrials exploit these people. Before your coming, they lived in peace and plenty in the countless worlds of the belt. We of Venus will befriend them!"

There was a twinkle in the man's eye that showed what he thought of the Asterites. Burgess grunted and started to spit, then remembered he was encased in a space suit.

"Keep those wretched things away from me," he ordered. "I don't like them. Well, we must be going. Goodbye—"

He stopped, staring into the weapons that had appeared suddenly in the hands of the Venusians.

"What's this—piracy?" he demanded. "You can't—"

"Nothing like that!" The Venusian looked hurt. "We're merely protecting our rights. We found this valuable asteroid, and we're going back for equipment to move it. To avoid competition, we'll see that you stay right here. Lucky we saw you just as we were leaving."

"We've no designs on your property," said Burgess. "And we have a job to do. A penalty contract. Put away those guns and let us out of here."

The Venusian motioned to several of his natives, and they started to open the airlock of the freighter.

"In space," he said, "it's dog-eat-dog. If we're interfering with your job, that's your tough luck."

Burgess watched helplessly as the Venusians marched into his ship. He glowered at the guns held by their captors, and at the happy Asterites, who were leaping happily about the surface of the tiny planet, evidently overjoyed to be back in their natural habitat.

They were puffy, boneless creatures, all muscles and powerful tendons that were de-

signed to make mighty leaps to escape the gravity of a small asteroid. None were ever found on the larger bodies of the belt; they were space-going nomads who moved constantly from one planetoid to another.

The sun and the comets were their gods, and to an emperor in a remote hollow asteroid they paid vague allegiance. In the few centuries since the first space ship had reached the asteroid belt, they had become a race of clowns, aping the habits and manners of spacemen. Human ways and words were common all along the billion-mile periphery of their world.

Burgess grimaced, with a spaceman's natural dislike of the creatures. He knew the Venusians felt the same way. They were using the Asterites only for convenience.

The Venusians were coming from the freighter. One of them, a native, reported.

"We are remove engine part, sir," he trilled. "Ship will not move."

"Excellent," said the Venusian leader. He beckoned to one of the Asterites. "N'ser," he called.

The Asterites bounded toward them. The Venusian saluted soberly, and N'ser responded, using a fingerless appendage that normally was employed in locomotion.

"N'ser," said the Venusian, "we go now, as planned. While we are gone, you will watch these two Earthmen. See that they do not leave."

He motioned for his men to re-enter the space ship. The last one in, he waved mockingly at the two men.

"Have a nice time," he called back.

Burgess watched with a sour expression as the Venusian vessel took off and disappeared into space. He inspected the Asterites who surrounded him and found nothing to make him feel any better. The one known as N'ser pointed toward one end of the bar-shaped asteroid.

"Go!" he commanded.

Burgess growled into his faceplate. He and Kelley started marching, still encircled by the waddling N'ser and his crew.

"This is kidnapping," he said angrily. "And to be held by animals like this—"

"Keep your chin dry," Kelley advised. "It is ironic, though, isn't it? Hey, look!"

Burgess looked. They were nearing the end of the asteroid. The Venusians had built a small glass-domed building presumably containing air. As they came closer, they saw that several more Asterites were inside, engaged in startling activities. He heard Kelley's amazed voice:

"Are the critters mad?"

As N'ser motioned them nearer to the enclosure, Burgess decided that the "critters" must be mad. They were leaping and twisting and flipping in convulsive ecstasy. He saw one Asterite twirling another like a wrestler performing an aeroplane spin. Another couple were violating the law of centrifugal force. Still others were happily engaged in proving that what goes up need not come down; and all were flouting the law of gravity.

THAT was the clue Burgess needed. "They're dancing!" he exclaimed. "These beings imitate humans! They've learned some ancient tribal dances of Earth, no doubt, and modified them to the slight gravity of the asteroid belt. Wonder what they use for music?"

A few minutes later he found out. They were brought into the dome through an air-lock. In a corner near the entrance was a glittering metal-and-plastic box, taller than a man and provided with garish decorations and slowly revolving soft lights, as well as an imposing control board with many push buttons. From this instrument blared a weird melody.

The two men regarded this mysterious machine in wonder.

"Is juky box," N'ser explained. "Gift from Venus man. He give us much nickel, much jive in can. Put it in nickel, push him button, he make music!"

And the Asterite, quivering to the rhythm of a battery of clarinets, started feeding nickels to the machine.

"A juke box!" Burgess repeated. He nodded in understanding. "I've seen them in the Smithsonian. They were used in—the Twentieth Century, I believe."

He noted the label beside one of the buttons: JIVE PATHETIQUE, by HANK'S HEP CATS.

"Back in Tschaikowsky's time, I'd say."

The Asterites were crowded expectantly around them.

"We search," said N'ser. "You remove it clothes."

Burgess started to explode, then shrugged carelessly. He started removing his space suit. While the Asterites searched each item of clothing as he removed it, his mind continued to ponder the ancient music machine.

"Wish I could remember just what that museum guide said," he mused. He stepped out of the last of his heavy space gear, and from force of habit put a hand in his trousers pocket as he thought. "They run on nickels—hmm."

He studied the apparatus for operating the instrument. All the push buttons were down, but as he watched, the number being played came to an end, and one of the buttons slid out. A number of nickels were visible through a glass slot. All shiny new nickels.

In his hand was the battered Martian coin Kelley had supplied. He dropped it into the slot, as he had seen N'ser do, pushed the button and shoved the coin into the machine just as a new number blared out.

N'ser's men finished searching. The fingerless limbs of the Asterites suddenly developed prehensile qualities, and the two men were disgusted to see their personal belongings disappear swiftly into the ranks of the greedy beings. Burgess exploded with a curse and tried to snatch back a little black notebook. N'ser poker a gun into his face.

"I am study Unite-it States history," the Asterite declared. "To victor belong spoils. Say so in book!"

"Who read the book to you?" Burgess demanded. "Give that back!"

The little black notebook disappeared.

"I am know about black book," said N'ser, wisely. "Some day maybe visit Earth. Is maybe can use!"

Burgess knew with sudden insight why mad dogs froth at the mouth. He restrained himself only by concentrating his gaze down the barrel of N'ser's theta-ray gun. At his side, Kelley was expressing himself with even greater fervor. Their captors had relieved the rocket man of his bright red suspenders, and he was angrily shaking one fist, holding up his trousers with the other.

The Asterites disregarded their indignation.

"You dress now," N'ser ordered. "We make hot jive party, for alley-gators only. You go back your ship."

Burgess snatched his space suit, climbed into it in jerky motions. A few minutes later he and Kelley were marching back to the asteroid's equator. Burgess forgot his own troubles and listened in admiration as Kelley, tripping along beside him, profanely delivered his opinion of the race of asteroid dwellers.

"At least," he consoled the rocket man, "we'll be away from them. They won't be in our hair now."

Kelley exploded again as he lost his footing.

"They could at least have given me a safety pin," he growled.

Inside the freighter, they removed their

space suits. While Kelley checked up on the condition of their rocket apparatus, Burgess set up the telescope in the nose, directing it on the Asterites' dome.

HE SAW two armed Asterites bounding off in the direction of the power station. The creatures knew enough to guard that vital point, then. But he was certain he could outwit the dull-minded Asterites. If only the Venusians would stay away long enough—

Kelley came back into the control room. The rocket man was still red hot, though he had put himself together with safety pins.

"Those back-stabbing Venusians stole the key gyros out of our steering gear," he reported. "And they took the spares, as well. We can go as far as we want—but only straight ahead!"

Burgess nodded.

"Only in one direction, eh? No telling where we'd end up—Andromeda, maybe. Clever, aren't they?"

"Clever!" Kelley reached deep into his vocabulary and found the proper name for the Venusians. It was a Martian term, an especially choice aspersion on their ancestry, and he repeated it, rolling the phrase happily on his tongue. That seemed to soothe his feelings. He hitched up his trousers and found a cigarette.

"Stealing a man's suspenders is the lowest crime there is," he stated. "Not much use trying to get away now. You should give me change for that plugged nickel."

"You may get a handsome return on that investment yet," said Burgess. The pilot was watching the dome through the telescope. "Come-see. There's something going on."

Kelley put an eye to the instrument and gazed blankly. He scratched his head.

"Seems to me," he said, "that somethin' AIN'T goin' on!"

"That's right." Burgess sat down and smoothed out a cigarette. "Might as well sit down for a while. Before our visitors arrive."

"What's up?" Kelley wanted to know.

Steve Burgess struck a match to his cigarette, grinned through a cloud of smoke.

"The Asterites are facing a grave crisis," he said. "The juke box has stopped . . ."

As he had predicted, a delegation of unhappy Asterites showed up presently. They were allowed in the ship and the two men listened gravely as they recited their troubles.

Burgess nodded sympathetically. He saw no need to explain that he had recognized

the ancient music machine as a counterpart of the one the Smithsonian guide had explained. That museum specimen had contained a gadget that held a defective coin until the turn of a key released it—evidently in the misguided belief that the type of person who would insert a slug would be embarrassed thereby.

He had recalled this when he had seen the key, partly hidden at one side.

"So," N'ser concluded, "is stop juky box. Can maybe fix?"

His eyes moved pleadingly from Burgess to Kelley and back. Burgess stroked his chin and looked thoughtful. He let the Asterites worry for a few moments while he pretended to ponder the problem. Finally he nodded.

"Yes," he said. "Fact is, I kind of expected something like this to happen. I could see your juke box wasn't imperviously calibrated. This is a case where the influx of ionized amperage wasn't properly compensated by the iambic pentameter—"

He delivered a brief lecture on the perils of asphyxiated fungi and carbureted habeas corpus, to which the Asterites nodded intelligently.

"Is true," N'ser admitted. "Is very fact, as stopping of juky box prove. But can fix?"

Burgess rose.

"Easy. We merely revitalize the incipient effervescence by using a fragmentary faux pas. With cerebral incompetency, of course. It'll be necessary for you to have cerebral incompetency."

He wagged an earnest finger in N'ser's face, and the Asterite quickly agreed.

"Most sure thing. Will have much of same. But—can make juky box play?"

Burgess sighed sadly and jerked a thumb toward their hold.

"There's eight hundred miles of wire in there. If that doesn't make your juke box play, nothing will. Have your boys haul it out."

A short time later, the two men stood at the entrance of their space ship and watched the Asterites strain at the task Burgess had assigned them. They had hauled the eight hundred miles of wire around the asteroid eight hundred times, and only a few yards were left.

BURGESS set his partner to work supervising the Asterites at the task of splicing the ends of the numbered wires; and he and N'ser made a visit to the power station. Sure enough, there were two guards there. The Asterite chief explained,

and the guards relaxed.

The creatures had followed Burgess' instructions to leave plenty of slack where the cable passed the power-station. He spent some time making his connections, taking care that they were spaced properly over the eight hundred miles of wire. Then he and N'ser started back.

Mentally, he reviewed the set-up:

"Kelley's crew is splicing the beginning of each wire to the end of the one with the next highest number. We have a hundred wires in the cable. So when we connect the beginning of number 100 with the end of number 1—"

At that moment they came within sight of the ship. Burgess was shocked to see Kelley in the midst of a crowd of milling Asterites.

As he watched, one of the creatures broke free of the group, Kelley close behind him. The man threw himself forward in a tremendous flying tackle and a moment later the melee had again surrounded the two. Burgess and N'ser rushed forward and tore into the pack.

Burgess heard Kelley's jubilant voice in his helmet radio:

"I got 'em! I got 'em!"

And the rocket-man emerged at the peak of the pyramid of squirming bodies, holding aloft his red suspenders.

N'ser broke up the battle. He produced a gun and waved it angrily in Kelley's face.

"You are steal!" he shouted angrily. "Is not your thing! You give back!"

Kelley hugged the suspenders closer to him.

"You go to the devil," he told the enraged Asterite.

Burgess moaned.

"Give them back, Pat! You're spoiling everything!"

He stepped helplessly between the two, silently cursing Kelley's Gaelic stubbornness that had brought matters to a head too swiftly. He wished fervently that the red suspenders were in the lowest chamber of Hades.

"It's the principle of the thing," Kelley growled.

Burgess wondered if he could get a good solar plexus punch through the thick space suit, decided it wasn't possible. And he couldn't reason with the aroused Kelley. There was only one thing left to do.

He did it.

In a swift, unexpected motion, he tore the gun from N'ser's grip, leveled it on the dozen surprised Asterites.

"Back," he ordered. He whirled on Kelley.

"You stay out of this! Are your wires all spliced? Good! Hook up to the power leads on our ship. Then get inside and—"

He broke off to snap a shot at an Asterite who was trying to pull a surprise end run. The steaming theta rays grazed the creature and he rejoined his fellows with a howl.

The Asterites were gathered in a sullen semicircle before him. He stood tensely, feet wide apart, meeting their hostile eyes. Behind him, Kelley was working with quiet speed, finally sobered to the gravity of the situation.

"Hurry," Burgess breathed into his mouth-piece.

"Another thirty seconds . . ."

Kelley's whispered words seemed to drift into the helmet from far away. Because that crouching group of Asterites commanded all Burgess' attention. His finger tightening on the trigger of his weapon, he faced their glaring eyes. If he could only keep them off for a few minutes—

A theta ray scraped the ground a few feet from him. The Asterites at the dome had seen, and were firing at him. He moved back a few feet, hoping to reach the cover provided by the ship.

In that moment, the charge of the Asterites tore him from his feet. Wildly they came, batting the flaming weapon from his grip and almost flattening him. He struck out desperately as he saw the gun sail skyward.

"It's all set," came Kelley's anxious voice. "I'm throwing the switch! There it goes!"

Burgess, battling savagely, saw with part of his mind that the very universe about them was changing. The sun, which had been in a "mid-afternoon" position, moved with a sickening speed behind the far pole of the asteroid. Its illumination became a harsh twilight that outlined every crevice and outcropping of the rough surface.

The Asterites broke off their assault for a moment, noting with astonishment this new phenomenon. Kelley dashed out of the ship, shouting a great battle cry. Burgess choked in huge gulps of oxygen, turning up the dial on his chest for a greater supply.

SOMETHING flashed downward before him, struck the surface solidly at his very feet. It was a small chunk of metallic rock. And it didn't bounce. It stuck fast where it landed.

Burgess kicked at it. The nickel-iron meteor seemed welded to the surface.

The Asterites were getting over their amazement, gathering for another charge. Burgess glanced swiftly behind, backed to-

ward the open airlock of the ship. Then the asteroid dwellers again swarmed over him.

Back to back, he and Kelley struck out in the losing fight. He was borne down by the very numbers of the angered natives. He dodged in desperation as one of them lashed out for his face plate.

Something whizzed down from above, struck into the soft flesh of the Asterite. The creature stiffened in pain, knocking over one of his fellows. Burgess wriggled halfway to his feet, tripping one of the beings who was trying to kick in Kelley's face plate.

Another speeding missile from above plunked into the midst of the struggling natives, causing them to jump aside in fear. Then came another that hit a living target and brought an agonized expression to an Asterite face. They all gazed fearfully spaceward.

Burgess took time to look hurriedly at the surface of the asteroid. It was becoming marked by small and large pieces of meteoric material that was falling faster and faster from the void.

The storm was much more intense at the poles of the bar-shaped asteroid, and the Asterites were dashing madly out of their dome and making great leaps into outer space.

Several more solid pieces of matter struck nearby. The Asterites who were attacking them broke up in panic. They fled, with only one thought—to escape this devilish rain of shrapnel from an unseen source. Using their natural facilities, they sprang from the surface of the deadly asteroid. It was clear that the terrified beings had only one thought. To escape as quickly as possible to a safer portion of the belt.

Only N'ser remained. He was struggling with a piece of metal that seemed fastened to the surface. Burgess rushed hopelessly forward as N'ser brought up the object.

It was the gun!

Burgess knew with a sickening certainty that he was too late. Charging over the still sprawling Kelley, he stared death in the face, down the barrel of the weapon as N'ser sighted at point blank range.

Something crimson flashed before his eyes.

Kelley's suspenders! The elastic twirled around N'ser's stubby wrist, deflecting the weapon. Kelley, holding the other end, jerked, and the shot went wild. Burgess felt the searing theta ray burn through the sleeve of his space suit.

N'ser lost the gun. It plunged to the ground and stayed there. The Asterite stared stupidly at it for a few seconds.

Then he gave up. He followed the example of his companions, leaped into the sky and disappeared.

The two men helped each other through the airlock. The drumming of tiny particles on the hull of their ship was a rising arpeggio. Burgess staggered to the switch Kelley had rigged and shut off the current.

The patter died down.

"I don't get it," Kelley moaned, as they removed their space suits. "Will you tell me just what happened?"

Burgess examined his arm. Not as bad as he had feared—only a first-degree burn.

He sat down and felt for a cigarette.

"We put eight hundred turns of wire around this big iron bar," he explained. "When we hooked up to that power-station and shot electricity through the wire, we made a very efficient electromagnet. We attracted every piece of iron for thousands of miles—and the asteroid belt is full of iron particles."

"Don't I know it," Kelley said, rubbing his leg where a small piece had struck him. "I remember now—an electromagnet is more effective in open space, isn't it?"

"Correct. The first spaceship to escape Earth's gravity discovered that. With no competition from the force of gravity, the efficiency of an electromagnet multiplies."

HE FINISHED slapping a crude dressing on his arm and grinned at Kelley.

"So we miss out on our penalty contract. But now we can take this valuable iron mine back to Earth and sell it to the highest bidder for a fortune. A good day's work, I'd say."

Kelley rubbed his leg thoughtfully. His eyes were sad as he peered at the pilot. He shook his head.

"Did one of those armored raindrops hit you where you think?" he asked.

Burgess smiled condescendingly.

"This attraction works two ways," he explained. "You'll remember that when you first threw in the switch, the asteroid turned one pole to the sun. That's because the sun contains iron. Naturally, we couldn't attract the sun to our magnet, so our magnet went to the sun. Get it?"

He went back to the telescope and looked in the direction of the domed building. He

scratched his chin thoughtfully.

"Most of the iron was attracted to the poles," he mused. "That dome must be pretty well shot up. But maybe—"

Looking worried, he reached for a fresh space suit. Kelley was sitting motionless, staring with a miserable expression. Burgess regarded him with surprise.

"Something you ate?" he asked politely.

Kelley raised his despair-filled eyes.

"Don't you realize what you've done?" he demanded. "You've got us speeding like the eight hammers directly sunward! We're dashing madly into the sun—and we can't escape! It's suicide!"

"Oh—that." Burgess slipped into his space suit and zipped it thoughtfully. "That's up to you," he said.

He picked out a helmet.

"You're the rocket expert," he told Kelley. "You have the material and plenty of time. In this feeble gravity you can take the motors right out and carry them down to the sunward pole. Use them to slow down our speed—you won't need the steering apparatus."

"Oh—I can do that." Kelley looked relieved for a second. Then the worried expression came back. "But we'll still be about forty million miles from nowhere."

"That's right up my alley," said Burgess. "By the time you slow us down, we'll be near Earth's orbit. And if I remember correctly, Earth will soon be showing up at about that point. We'll be close enough for radio communication, and close enough to market to get a good price for this iron."

He pulled the helmet over his head and started out the lock.

"Hey!" Kelley shouted. "Wait for me!"

Burgess opened his face plate.

"Uh-uh. You can handle that job yourself. I have something else to do."

"What?"

"I want to inspect the damage at that dome. And see if my little black notebook is there. And—"

He grinned self-consciously.

"I've been remembering more about those juke boxes. I want to find out if that—ah—jive foundry, is still hep to cook up some solid eight-to-the-bar stuff. That museum guide was wrong when he said juke-boxes were extinct!"

Scientific Wizard Richard Carr Ventures Into Outer Space Ready to Create Universes Beyond the Horizon of Civilization in THE DEVOURING TIDE, a Startlingly Unusual Story by POLTON CROSS Coming in the Next Issue!

UNSUNG HERO

By
RUTH WASHBURN



Thankfully, Lester felt himself sinking through the dissolving boards of the bridge

Suffering from That Henpecked Feeling, Lester Brant Slips into Another Dimension—and Here's What Happens!

THE city editor of a big Chicago daily, listened to the metallic clutter that came out of the phone. His features registered surprise as if they were unused to showing that emotion. Then he slammed the phone back in its cradle and charged out of his sanctum, arms waving.

"Mahoney—Jones—Peabody!" he yelled. Jones fell under his eye first.

"Jones—get that new camerawoman and scram down to Madison Street. The boat traffic on the Chicago River is blocked there. Might be saboteurs. Nobody knows how it is being done. Big story. Impeding the war

A PRIZE-WINNING AMATEUR CONTEST STORY

effort. Well—didn't I make myself clear?"

Jones colored and swung on his heel. The editor looked around for the other men.

"Mahoney—Peabody!" he yelled.

"Right here, Ed."

"Okay, you two. Get to the leading scientists around here. See if they have any ideas about this thing. If they haven't, give them an idea they'll recognize. All right, get going!"

A few blocks away, in the newsroom of one of the big broadcasting stations, a news-writer handed a sheaf of copy to a commentator who was due on the air in five minutes.

The commentator glanced at the leading item. A bored smile spread itself over his face.

"What's the matter?" he asked, "isn't the war on a dozen fronts giving enough copy? Do you have to make up fairy tales?"

"Leading scientists are unable to advance any ideas that might account for the inexplicable blocking of the Chicago River to marine traffic," he read.

The writer leaned back in his chair.

"Listen, pretty-voice," he rasped. "That story is important. And, you're paid to read what I write, the way I write it. Remember that."

The commentator shrugged and turned away.

LESTER BRANT closed the door of his little basement laboratory as noiselessly as possible. Matilda would discover his absence soon enough, he knew. Matilda rarely let him have a whole evening alone in his laboratory.

She hadn't any faith in his inventive genius. She thought he ought to stick to lens grinding. True, that solid profession had always provided their bread and butter and an occasional piece of cake. And, Lester might have added, a substantial bank account that Matilda thought he didn't know about.

Lester's first action after closing the door, was to turn on his little radio, keeping the volume down. He always tried to listen to the news down here. War news depressed Matilda.

The voice of Lester's favorite announcer started talking to him from the shabby box.

"After twenty-four hours of effort, the Chicago River is still blocked to traffic. The leading brains of the community admit temporary defeat by unseen forces. Nationally known engineers and scientists are being rushed to the spot to cope with the

problem. In the meantime, river traffic is limited to the areas south of Monroe street and north of Washington Boulevard. Between these two points, a loaded barge and its pilot tug were trapped when the unseen barrier went into operation."

Lester listened with growing excitement. Here was a situation made to order for him. Opportunity was knocking on the door of his own private laboratory. He switched off the radio.

"Unseen barrier," he muttered. "The chance of my lifetime."

It had always been his theory that other worlds existed coincidentally with ours. A burning ambition to explore these other realms had spurred him on. Dreams, about to be realized, had been his companions for years.

His hands shook with excitement.

The shiny black machine to which he turned, looked like a diathermy cabinet. Lester inspected its complicated face carefully. He turned a switch and waited, then nodded with satisfaction as the indicators swung into position and held.

From a cupboard the little man produced another piece of apparatus. At first glance it looked like the equipment used by telephone operators. The small receiver, when the neck strap was adjusted, rested on the chest.

Instead of a transmitter, it had a switch and dial for power control. Instead of earphones, a stubby pair of field glasses were attached to the receiver by means of a small cable. The field glasses were provided with earpieces to hold them in place. Lester polished the lenses carefully.

EVERYTHING was ready for the first test. His hands felt clammy, and he took time to wipe them carefully on a clean handkerchief. All he had to do was turn the little switch to on, and the receiver would pick up the special wave being broadcast from the black cabinet.

This in turn would be relayed, via the small cable, to the specially ground lenses in the field glasses, activating them in such a manner that they would become veritable dimensional windows. If this worked according to plan, he, Lester Brant, would be a great man. He would be Professor Brant, wizard of the dimensions.

The soul-satisfying dream was ruptured abruptly.

"Les-tur."

Matilda's police-siren voice pricked the bubble of his elation. Lester exhaled a

breath of resignation. Why, oh, why had he once considered it necessary to marry that—that blimp?

The door of his little sanctuary began to do a rhumba under Matilda's determined fist.

Lester's first impulse was to hide his precious brain baby. Then his jaw set firmly. If he opened the door, Matilda would come in talking. It seemed to Lester that Matilda,

He was conscious of the power surging into the receiver—too much power. It seemed to grasp his whole being. It made his body vibrate queerly.

With a gasp Lester realized that he was sinking through the floor. The familiar surroundings were not only fading from his sight, they were actually dissolving around him. He had a last glimpse of Matilda, slack-jawed in the doorway, as he began to

Meet the Author of This Story



Ruth Washburn

VERMILION, South Dakota, is my birthplace. Theodore Roosevelt was president at the time.

I started kicking over the traces at an early age. I ran away from home at the tender age of fourteen. Passed for eighteen and got a job slinging hash in a beanery in Aberdeen, S. Dak. That's a job I have detested ever since. After a week of it I was glad to go home again.

Managed to stay rebelliously in school until I was seventeen.

Had a shot at business school in Omaha, Nebr., after that but I ran away again to follow a carnival through the Middle West.

Tired of that, I tried selling cosmetics on the road. That's no job for a lady either. I didn't last long at it.

I've been a cook. Made a living at it I mean. My specialty, fried chicken and deep dish apple pie.

I've worked on farms, doing everything from raising chickens to husking corn. I'm considered a fair practical nurse, having picked that up out in the farm country as so many women do out there where neighbors are important.

I spent two years behind a counter in a department store in Milwaukee, Wis. Went to night school to learn to pound a typewriter. Spent six years in candy and cracker factories in Sioux City, Iowa. Hail to C. M. Young of that city, my favorite boss of all time.

In 1937, I came to Chicago because my husband was transferred here. I went to work for the Silhouette Manufacturing company. Transparent raincoats, to you who wonder how a Silhouette could be manufactured.

After I left them, I decided to use my talent for designing and dress making to earn my bacon and eggs and iron tonic. Have had fair success at that job—only, I want to be a writer.

Why? I dunno. Only I've always wanted to be a writer.

No offspring. A stepson with the Army in Alaska.

Greatest ambition: To have someone say, "That Washburn dame can write, can't she?"

—Ruth Washburn

like the pugilistic devotees of that sport known as boxing, always came out punching (with words).

Well, this time Matilda's words would not interrupt his historic moment. He ignored the agitated door.

Quickly he adjusted the glasses and turned the switch on, just as he realized that he had neglected to lock his door. Matilda was coming in anyway. He lifted his eyes to meet hers.

fall. It was a queer sensation. He floated down as if the air had suddenly become molasses. He had a quick look at a strange, arid landscape, then the seat of his pants hit a smooth curved surface, and he began to slide. He smacked the bare ground flat on his back.

TOO amazed to move, Lester saw that he had landed on what was apparently an opaque glass bubble.

He watched as the bubble slowly became transparent.

He felt his jaw muscles go slack and was unable to close his mouth, for, inside the bubble, two beings peered out at him. After a moment, they drifted through the side of the structure and came close to him.

Their shapes were vaguely human. At least they had heads with wide, saucer-like eyes. They looked like a comic artist's conception of a ghost, except that they stood flat against the ground and moved as if they were on silent rollers.

Lester could almost feel their puzzled gaze.

"What do you suppose it is?" one entity queried the other.

Lester tried for a moment to figure out which one had spoken. He was aware of the fact that he heard no sounds. He only knew that the words (or was it merely the thoughts?) had come from their direction.

"Queer looking, isn't it?" One of the entities put out a pseudopode at about knee level and nudged Lester.

"It doesn't seem to be dangerous."

One of the beings hopped over Lester and settled on the other side.

"It is aware of us." Now he could tell which one was speaking. The thought came from the left of him.

"Did you notice the number of appendages?" the one on his right telepathed.

"Very queer. Quite amusing," the first one agreed. They moved in closer.

This, Lester suddenly decided, was about enough. He didn't want those things to get any closer to him. They seemed to be getting ready to prod him some more.

He scrambled to a sitting position and waved his arms at them.

"Get away from me. Shoo!" he yelled.

Then he stopped, scared stiff. Not a sound had issued from his lips. But something, perhaps the powerful thought wave he had projected, bowled the two beings over like ten-pins.

After a moment they rocked back to an upright position.

"Wheeew," one of them remarked.

"No emotional control," the other pointed out.

They both turned their great saucer eyes on Lester. Suddenly, he began to feel a soothing, calming thought wave engulfing him. He knew now that these creatures meant him no harm. They were only eager to know things about him. Lester felt the impulse to converse with them.

"Where am I?" Lester asked. But that

sounded silly. "I mean, what is the name of this place?" he corrected.

"Don't you know?" they chorused. "Then how did you get here, and why did you come?"

Lester chalked up a false start against himself.

SKIP it," he told them. "It doesn't matter anyway."

He seemed to have landed in the midst of a village of the strange bubble houses. He was sure that he was in another world. Then he remembered falling. How far, he had no way of knowing.

He might have drifted down here in seconds. Or he might have been minutes on the way. One thing seemed certain—this place existed within the crust of the earth as humans knew it.

The thought made him feel a little weak. It meant that, if he turned off the receiver, he would materialize underground back home and be literally buried alive. The idea made sweat pop out on his forehead. He fumbled for his handkerchief.

"Listen," he begged, unconscious of the fact that he was accepting telepathy without giving it a thought. "I want to see your master."

The two entities kept staring at him amazingly. They seemed much more interested in what he was doing with the handkerchief than in the thoughts he was trying to convey.

Lester automatically raised the power of his thoughts a notch.

"Don't you have anyone in authority around here?"

The entities seemed to feel the force of this question. They stopped staring and looked at each other.

"Ool?" one queried.

"Undoubtedly," the other answered.

They both turned their great sad eyes on Lester again.

"Ool is very busy," one of them explained. "I'm sure he wouldn't like to be disturbed."

"You see," the other one took up the explanation. "Ool is erecting a force dome over the thinker's colony, and he is having much trouble. The dome refuses to be a dome. It just keeps on going up and up in a circular wall, nobody knows how high."

Another false start—Lester sighed.

"Look," Lester began again, "You both have names don't you? Let's be friends. I am called Les-ter."

He pronounced the syllables distinctly

and he could feel the beings seize the name and turn it over and over in their minds.

"I am Tnn," one of them told him. "This is Mmmm."

LESTER wondered disgustedly, how they expected him to tell them apart. They were identical as far as he could determine. And this business of the dome of force that wouldn't work.

He wasn't interested in that—or was he? Maybe he was at that. Now he had to see this Ool person—. Lester began to feel excited. He was aware that he was very warm.

He looked for the sun. There was only a pinkish glow in the west where the sun should have been. He got warmer. His felt hat, which he had grabbed at the last minute at home, had fallen off when he came tumbling down here. He removed his coat.

Instantly, he felt the wave of amazement that washed over the minds of the two beings. Their thoughts flew back and forth so fast that Lester couldn't intercept them.

They took the coat from him with tentacles, which they seemed to be able to project from any point of their rounded bodies at will. He waited while they examined the garment. Finally Tnn looked up at him.

"What is this?" he asked.

It was Lester's turn to be amazed.

"It's a coat. You know, a garment to keep you warm."

"But that is unnecessary," Mmmm told him. "The warmth is here. You only have to feel the need of it."

Lester knew he had been picking up heat from somewhere. He opened the collar of his shirt.

He could feel the new wave of amazement that engulfed the entities. Suddenly, he was surrounded by miscellaneous tentacles moving at incredible speed. When he emerged from the melee, they had his shirt, shoes and trousers and were looking longingly at his striped underwear shorts.

"Cut it out," he yelled.

Too late, he remembered what his uncontrolled thoughts could do. This one rocked Tnn and Mmmm away from him like bushes bending under a stiff wind, only this place didn't seem to have anything like a breeze, let alone a wind.

He would have welcomed a cooling breeze. Instantly, as the thought passed through his mind, he seemed to cool off. He felt so comfortable that he dismissed the whole thing from his mind. Anyway, Tnn and

Mmmm were returning, and he wanted to renew this battle of wits.

So far, he was in a pocket. He couldn't get Tnn and Mmmm interested in his problems, and he didn't dare to try returning home for fear of being interred prematurely, so to speak. But he had a new idea.

"If your friend, Ool, is too busy to come here to see me, why don't you take me to him?" he asked Tnn after he made sure he had their attention again.

Tnn and Mmmm went into rapid consultation.

"All right," they agreed. "Come with us."

Lester lifted one foot to take a step in the direction they had indicated, but Tnn and Mmmm were gone. One moment they were there looking at him, the next moment they weren't.

LESTER felt a foreign impulse impinging upon his chaste soul. He wanted to cuss. He dismissed the idea almost at once, figuring that it would be a waste of time. He might as well get started looking for Ool. They were probably waiting for him to show up.

He started off in the direction Tnn had indicated before. Walking was difficult. It was as if he were walking in water up to his neck. Every few steps, a foot would decide not to come down again in the orthodox manner. Lester suddenly realized that he was working up the remnants of a long disused temper.

His struggles were interrupted by the reappearance of the two entities. Tnn and Mmmm had come back for him. Lester took another tentative step, signifying his willingness to follow them. They goggled.

"Is that your only mode of transportation?" Tnn asked.

"Of course not." Lester was indignant. "We ride horses. We have motor cars. We even fly through the air in planes. And," he added after a moment, "it seems to me that you could be civil enough to furnish some mode of transportation."

"If you will blank your mind," Tnn informed him, a little stiffly, "we will take you with us."

Of course, teleportation—Lester wondered why he hadn't thought of it at once.

He closed his eyes and relaxed. Immediately he felt the presence of others. What would have been the babble of a mob back home made itself felt in his brain.

He opened his eyes to a strange scene.

They were standing close to another settlement of the bubble houses. Surrounding this entire settlement was a huge circle of the people of Tnn's race sitting, or rather squatting, side by side.

Others were flitting around on the outside, sometimes changing places with one of the beings making up the ring. Replacements, they appeared to be. Then one of the beings confronted them.

"This is Ool," Tnn telepathed to Lester.

Before Lester could formulate a suitable greeting, Tnn was flashing a tornado of thoughts to Ool.

"And strangest of all, this being has two names—Les Tur." Lester heard the ending statement.

He was beginning to get the hang of telepathy. You just relaxed and opened your mind and gathered in whole thought pictures without bothering to separate them into ideas or words.

Ool turned to Lester, who gathered how annoyed Ool was that the curtain of force being projected by these linked minds couldn't be bent into dome-like structure.

The "Ones" in the circle ceased to be "Ones" when their minds were linked. The linked power was greatly magnified. Thus, three linked minds were equal to nine single minds and four linked were equal to sixteen."

Lester was staggered at the thought of how much force this huge circle of linked minds could generate. That was Ool's trouble, exactly, he gathered.

They had generated so much force that they could not bend it to their combined wills. Anyway, they didn't make a dome, and the force went on in a straight line and ended Ool didn't know where.

SUDDENLY, Lester felt like the only kid in the class who knew the answer to teacher's question. He had an idea that Ool's "Ones" were generating more force than Ool dreamed—enough in fact to penetrate another dimension. If that were right, he had the answer to the problem that had the scientists stymied back home.

The only way he could make sure was to go back and find out. He tried to explain to Tnn and Mmmm. Ool had flitted away again by this time. Tnn and Mmmm would not or could not understand.

They were obliging enough to lift him up to where he wanted to go. He had them carry him plenty high. He figured it was better to fall a few feet than to have to dig his feet out of the ground, or maybe

out of a cement sidewalk.

He turned off the receiver.

Before he saw anything familiar, he heard the sputtering tug beating out an angry tattoo. Ha!—he had come through to his own world, somewhere near Ool's force wall, and it had brought him out at the scene of trouble in his own world. Therefore it must be the unseen agent that was blocking the Chicago River.

Lester landed on the familiar Madison Street bridge with a soft thud. He had materialized near the end of the bridge where the crowd was thinner. About ten feet away, a young woman was busy behind a camera on a tripod. Lester saw her glance around at him, then do a double take and swing the camera toward him.

Behind him, a woman shrieked shrilly. Lester felt a cool breeze tug playfully at the legs of his striped shorts.

"Y-i-i—!"

With a despairing wail, Lester fumbled for the switch of his receiver. After an eon he found it. Thankfully, he felt himself sinking through the dissolving boards of the bridge, but not before he heard the triumphant click of the newswoman's camera.

This time, Lester knew the ropes. As soon as he felt himself falling, he concentrated his thoughts on Tnn and Mmmm and the spot beside their house where he had first met them. He was rewarded by the feel of the curved smoothness of the bubble dwelling under him. He managed to land upright this time. No one was in sight.

"Tnn—Mmmm," he called silently.

HE WATCHED the miracle of the bubble dwelling achieving transparency again. He'd have to ask them how it was done. Tnn and Mmmm were inside.

"Come in," they invited.

Lester looked for a door. There wasn't any. How did they expect him to get inside? Of all the blanketety-blank (Matilda didn't allow him to swear) places! Lester threw up his hands in defeat.

"Just come right through," Tnn advised him.

They meant he should walk right through the side of the house the way he had seen them do. He didn't think he could do it but he could try.

It didn't work. Lester backed off and rubbed his nose and wiggled his stubbed toes. They let him simmer down.

"Your approach is wrong," Tnn advised. "You must think your way through. Like this." He demonstrated.

"If these overgrown jellyfish can do that, so can I," Lester thought to himself. He closed his eyes and pretended that he was walking into a dense fog. When he opened his eyes a moment later, he was inside.

"Nice," commented Mmmm. "Welcome back."

Tnn joined them, and he and Mmmm proceeded to ignore Lester while they bent over a low central table. Lester watched them working with a dozen or so miscellaneous arms that seemed to appear wherever they needed them.

"I want my clothing," Lester interrupted them.

The two beings turned great sad eyes upon him. He almost felt sorry for them. Then he looked at the table where they had been working and felt his blood pressure rising.

Tnn and Mmmm had his things spread out there. The heel of one shoe was missing. The tongue and shoelace of the other were gone. They had taken samples out of his suit in odd and embarrassing places. It was too much. Lester's equilibrium had already been upset by the episode back on the bridge.

"Dabbity-dab-dab-dab," he shrieked soundlessly. "What made you do that to my good suit?"

Too late he remembered what his uncontrolled thought could do. He ducked and flung both arms up to protect his head. After a moment, he peeked out shamefacedly. The bubble dwelling lay in shards around him.

"Gee, fellows, I'm sorry," he began. He was talking to empty space. He supposed his outburst must have blasted them to kingdom come. Dejectedly, he donned what was left of his clothing. He had a notion to discard the shoes but he put them on, even if they did make him feel lopsided.

He was thinking strongly of Ool and the force wall when he bent to tie the one shoelace. When he straightened again he realized that he had been transported to the spot he had been thinking of. It surprised him a little to rise up and find Ool staring him in the face.

GETTING right down to business, Lester explained what Ool's force wall was doing to the river and the boat traffic back in his own world.

"You see," he told Ool, "you will have to do away with the force wall. That transportation being held up is doubly important since there is a war going on in my world."

"But we have grave need of the wall here," Ool protested. "This settlement is a think-

er's colony. It must be isolated. For instance, how would you like to be working on an absorbing problem and have someone else's stray thoughts always seeping in to ruin your calculations?"

"I can see your point," Lester thought at him gravely. "However, I still think our need is more important. And, if your wall isn't closed at the top it isn't much good anyway, is it?"

"It helps some," Ool sighed.

Lester took a deep breath. Confound these strange people who had so few material possessions and fewer needs for them.

"Why don't you surround each house with its own wall," Lester suggested.

"Too complicated," Ool objected.

Their conference was rudely interrupted by Tnn. It was the first time he had seen Tnn since he had demolished his house. But Tnn wasn't thinking about that. He was so excited he almost danced. Lester looked at what Tnn was holding to his chest with quivering tentacles.

"That's my hat," he told Tnn, reaching for it.

"Wait," Tnn commanded. He pulled the hat down over the rounded dome that served him for a head.

There was a chorus of mental gasps around him. Lester realized that Tnn's thoughts were strangely weak and fuzzy. Common felt was unknown in this world. Leather, too, he supposed—that gave him an idea.

He turned to Ool.

"I think I can solve your problem," he informed the other. "How many are there in your thinker's colony?"

"Half a hundred," Ool replied.

"Good." Lester rubbed his hands together. "If I bring you a gift that will serve better than the force wall, you will do away with it, of course?"

"Of course," Ool agreed.

"Then I'll be on my way," he told them. He turned and teleported himself into the air.

LESTER'S aim wasn't so good this time. He found himself clinging to the railing of the bridge, on the outside.

"There he is!" screamed a female voice. "Crawling up over the side of the bridge."

Lester felt a million eyes upon him. Anyway it seemed like a million.

"Les-ter!"

That was Matilda's voice. Oh, Lord, how did she get down here?

"Grab him, Finnegan," a blue-coated figure yelled.

Four strong arms of the law lifted him over the railing. The crowd closed in.

"Is this the guy?" one of the cops asked.

"That's him," the woman pointed accusingly.

Lester saw Matilda elbowing through the crowd. She arrived with her hat over one eye, waving a newspaper. He caught a glimpse of an unclothed figure with hambone knees on the front page.

"Lester, what's the meaning of this?" Matilda steamed.

"Just a minute, lady," interrupted the officer named Finnegan. "We got priorities here."

"Wait, all of you!" Lester begged. "Something more important should be considered first. Why won't that barge," he pointed dramatically, "proceed on its way in the normal manner?" He paused. "I know why."

Finnegan looked amused.

"Now, ain't that nice?" he winked at someone behind Lester. "I just know the Sarge will be delighted to hear that."

"But you don't understand," Lester protested. "I'm serious. This river is important to the war effort. I can open it to traffic again."

"All right, buddy." The officer didn't let go of his arm. "You and Nappy can discuss all that down at the Research Hospital. Now, come on, we're going to take you for a nice ride."

They didn't believe him. They thought he was cracked. Finnegan's smile and the falsely honeyed tone he used were sickening.

Lester was aware of Matilda's gray-coated bulk following him into the police car. He sat wedged between Matilda and the huge, hard-breathing cop. Matilda began to snivel into her handkerchief.

"Where have you been?" she wanted to know. "What happened to your suit? It's ruined. I can't understand—"

"Shut up!" Lester commanded her sternly.

Matilda swallowed the rest of her sentence in surprise. Lester knew she wouldn't give up that easily. Her eyes snapped, and she inhaled for a new start just as the car swerved to the curb in front of the police station.

"Saved by the bell," Lester muttered, and let them lead him inside.

A BIG man behind the desk looked him over.

"You been in a fight?" he asked, indicating the messed-up suit.

Lester shook his head and opened his

mouth.

"He was running around in his underwear," Finnegan cut in.

"I was not," Lester denied loudly.

Finnegan grabbed Matilda's paper.

"This ain't a picture of your grandmother." He slapped the paper across his palm for emphasis.

The Sergeant looked bored.

"Disturbing the peace," he yawned.

"Fifty dollars bail."

"Now, listen," Lester yelled. "That's not fair. I can explain all this." Then he added, "I think." It had just occurred to him that his story was a bit fantastic. He couldn't really blame them for not believing him. But he went on anyway.

"I know why the Chicago River is blocked, and I'm probably the only person in the world who can do anything about it."

"Don't give us that again, brother, please," Finnegan sneered. "Throw him in the bullpen," he yelled over his shoulder.

"Matilda," Lester pleaded.

MATILDA's jaw was like newly dried cement. She slowly folded her hands over her stomach, making sure that her fingers were carefully entwined in the handles of her purse.

Rage bubbled up inside Lester. He doubled up a couple of unaccustomed fists and showed them to his wife. At the same time, he discovered that words ground through the teeth sound really sinister.

He stepped close to her and saw her rear back in surprise.

"If you don't want me to give you grounds for divorce right here in front of everybody," he whispered, "you find fifty dollars in a hurry. And remember," he added, "it's my money you've got in the bank."

Lester was more surprised than Matilda at the turn of events. He had never guessed that the redoubtable Matilda could be bluffed so easily. He had been living under her thumb for fifteen years. He sighed.

Matilda produced five tens. They did stick to her fingers a little, but when they assured her that she would get them back, she finally let go.

"Would you please call a cab for us?" Lester requested with what dignity he could summon. "I still have the greatest part of my mission to perform."

"Ain't you kiddin'?" Finnegan grinned at him.

Lester stiffened his back. He patted his invention. "This apparatus has transported me to another world. A world adjacent to

ours. It exists at a slightly different level than ours and under different conditions. The trouble we have is a result of something that projects from that world into this."

The Sergeant lost his bored look.

"Is that so?" he wanted to know. He let his eyebrows wander north. "You mean that if I put on those little opera glasses and turn that little switch, that I'll be out of his world? Haw, Haw, Haw!"

He looked around for appreciation of his wit. Being a Chicago Police Sergeant, he got it.

Encouraged by a couple of grins, he reached for the contraption Lester was wearing. Surrounded by a ton of beef and brawn, Lester surrendered it. He helped the Sergeant adjust the thing, and turned on the switch.

He was partially rewarded by the stupid look that froze the Sergeant's features as he faded into nothingness.

"Why, you—" Finnegan advanced toward Lester with pincer hands. "Where did he go?" he demanded. Then they heard wild commotion in the basement. A moment later, the Sergeant came bounding up the stairs.

"Hey, you guys!" he yelled. "I saw the darndest things. Finnegan. The little guy's really got something here." He passed the things back to Lester.

"Finnegan," he ordered, "take the gentleman where he wants to go. Give him a motorcycle escort. This is very important. Burke, take the desk. I'd better handle this myself."

The Sergeant leaned over Lester.

"And Mr., Mr.—what was that name again?"

"Brant," Lester supplied.

"Yeah," the Sergeant continued, "Mr. Brant, if you come through with the goods, the blotter's wiped clean." He made a scrubbing motion. "I'm the guy that can do it."

Lester marched proudly at the head of the procession. In the car he gave Finnegan the name of the largest wholesale sporting goods house in town.

After a little argument they let him go in alone.

Twenty minutes later, he came out of the place bent under a strangely bulging sack. They headed back to the river.

Marching out on the bridge, Lester paused dramatically.

"In about ten minutes," he told them, "that boat will be free to continue on its way." The switch clicked.

Matilda squeaked as he disappeared.

"Lester, Lester—" She was breathing heavily.

"Hold it, lady," Finnegan advised. "Look out there."

A CHEER went up from the crowd as the barge suddenly lurched free and obediently followed the little tug upstream. Finnegan scratched his head.

"Well, I'll be—"

Lester popped back into their midst. Matilda's eyes lost their scared look and got mean again. Her face flared red. Lester ignored the danger signal.

"It worked," he informed them jubilantly.

Finnegan put his fists on his hips and made a pocketbook of his lips.

"You mean to tell me you did that?"

"Certainly," Lester agreed.

"With what you had in the sack?"

"That's right."

"Bud," Finnegan leaned closer, "would you mind telling me what you had in that sack?"

"Not at all," Lester spoke proudly. "It was football helmets."

Finnegan stood there breathing heavily for a moment. Then he looked uncertain and started to back away.

The desk sergeant thumped Lester on the back and made a scrubbing motion with his right hand.

Out of the corner of his eye, he saw Matilda bearing down on him with that look on her face. She was breathing on him when he held up his hand like a traffic cop. He gave her back eye for eye.

"Matilda," he said, out of his new dignity, "let us not discuss our private affairs in public."

"Wait till I get you home!" she grated.

Fear did not descend upon him. He laughed in her teeth with a nasty flare of his upper lip.

"My dear." He took her fat arm in an iron grip. "You must admit that you saw me disappear several times today. If you force me to disappear again, it will be for good. Is that clear?"

Matilda looked at her little meal ticket. She seemed to be trying to swallow a knot in her conversation. Lester was reminded of a mud puppy he had seen in an exhibit at the Shedd Aquarium.

"Get into that cab," he snapped. "Let's go home. I'm hungry, and I want a good meal."

"Pork chops," he added as an afterthought. Matilda hadn't let him have any fried pork chops for years.

Matilda choked a little on the pork chop order. Lester could almost hear her mind click—pork chops, eight ration points a pound. He gave her a stern look. That was something he would have to practise.

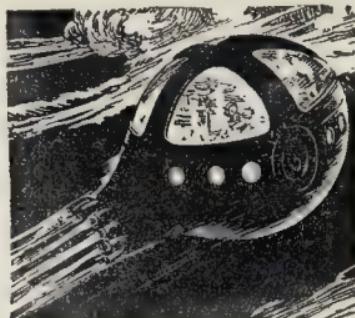
He was about to follow her into the cab when a hand touched his sleeve. It was a reporter.

"Would you care to explain your er—'invention' to the public, sir?"

Lester knew the man thought it was all a big joke.

"If you care to call at my home, I may be able to spare a few minutes to talk to you," Lester informed him with dignity.

He heard a few amused snickers from the crowd. Strangely enough, they didn't anger him. He was thinking of all the queer places waiting to be explored, of a home that would certainly be his castle from now on.



HEADLINERS IN THE NEXT ISSUE

WATCH that star cluster ahead, pee-lots. In that land of stars—California—Author Ross Rocklynne has placed the locale of his unusual novel, *THE GIANT RUNT*, which we have stowed away in the main hold for next issue. This is a surprising story of a despised runt who really turned out to be a giant—in several ways—and you are going to enjoy each way very much.

* * * * *

ONLY Albert de Pina could have written such a delightful novelet of bizarre exploits on Venus as *PRIESTESS OF PAKMARI*. This is a vigorous yarn of high scientific adventure which has been written in a delightful style. And we think you will like the illustration by the comparatively new artist, A. J. Donnelly. This novelet is also a four-star story.

* * * * *

NEXT we bring to you *HORATIUS AT THE BRIDGE*, an Amateur Prize-winning Story by Frank Ferry. This "first" story by this author has more than a touch of whimsy and humor in the style, and you are going to want to read more stories by Mr. Ferry. This present yarn is a modern adaptation of the use of sound vibration to accomplish certain amazing feats.

* * * * *

DEVOURING TIDE, a long short story by that old favorite, Polton Cross, is a story which deals in higher mathematics and leads the hero and heroine to the ultimate in intellectual conquest. Better put on your thinking caps when you read this one.

* * * * *

EVENING off things, to balance the cargo, as it were, there will be a good science article, a couple of science features, new Scientifacts, and as many other short stories as we can cram down the hatches and still have sufficient power for the take-off. No fooling, next issue will be darp!

* * * * *

ROARING ahead under full rockets, of course, will be a big reader department with lots of letters from pee-lots, information on the Science Fiction League, the Amateur Prize-Story Contest, Looking Forward, and other things. With Sergeant Saturn riding herd on the hilarious junior astrogators, as usual.

SCIENTIFIC FACTS

WATER, WATER, EVERYWHERE

PERHAPS the greatest single threat to the life of a shipwrecked voyager is that of thirst. For hundreds of years poets and novelists have written about it and philosophers and thinkers have tried to figure a solution to this problem. At last, out of World War II, comes a number of adequate answers.

The simplest device is the Permutit-Navy Desalting Kit which consists of a plastic bag and five briquettes, each of which will desalt a pint of sea water. Another method is the solar still, a special frame containing black Turkish toweling which operates on the principle of the salt remaining in the coarse cloth while the water vapor condenses and drips into the container at the bottom.

A third method is the belly still, which is a one-pint "boiler" strapped to a man's midriff and which uses body heat to vaporize sea water, carry it to a vessel trailing in the cool water of the ocean and condensing it there. This method is cumbersome and slow, producing about one pint of potable water every eight hours, but it is simple and requires no fuel.

A fourth method is the use of a seven-pound still that produces about six quarts of fresh water for every pound of solid safety fuel it burns. A number of lifeboats have recently been equipped with this apparatus. This outfit can produce about five pints of water per hour—as long as the fuel lasts. An adult person can survive for a long period of time on approximately one pint of water per day.

Now if some enterprising scientist will just figure a way to manufacture vitamins out of the chemical salt residues and proteins, carbohydrates and bulk roughage out of floating seaweed, all man will need in the future to go a voyaging will be a toothpick and a toothbrush.

PARASITE DRAG

IT HAS long been known that fish secrete a slick mucus as well as squirt water out of their gills to facilitate their

progress through the water, that men have greased themselves and the hulls of their ships to reduce friction drag, and in the twentieth century have streamlined their motor cars and trains to reduce wind resistance. Comes now the solution of a serious aviation problem at high speeds of airplanes.

This is skin friction, partially caused by the tiny surface irregularities such as the minute spots and stippling left on a plane surface when sprayed with paint. As much as five miles per hour of flying speed has been added by rubbing down the painted surface with fine abrasives.

And from Washington comes the news that shining stainless steel of the post-war era can be more highly polished than ever, and yet cheaper, for all such purposes because of the new electrolytic method invented by Dr. Charles L. Faust, of the Battelle Memorial Institute at Columbus, Ohio. Dr. Faust has obviated the tedious job of mechanical polishing by a special acid-and-electrolysis combination in which the electric current causes all roughness, stain and other surface defects to flow away from the metal, leaving a bright and mirror-like finish.

If the rest of us will just put a little more grease on the old elbow, we should be able to slide on into the future streamlined world with a minimum of effort and "parasite drag."

LIQUID COAL AND WOOD

AT THE terrific rate we are expending our petroleum reserves to win this War of the Four Freedoms, science is turning in earnest to other fields to bolster our failing oil supplies. The latest development is a partial return to coal. Let's pause an instant for a word picture of statistics.

Speaking of oil, Texas alone produces more petroleum than any foreign nation in the world—about one-seventh of the world's supply, with its forest of more than 80,000 producing wells. But this isn't going to be near enough oil for the future.

On the other hand, it has been estimated that if all the coal deposits in the United States were spread evenly over the entire State of Ohio, it would make a solid blanket

more than seventy-five feet deep.

The newest wrinkle is to pulverize coal and mix it with certain chemicals and an amount of crude oil and then put it through a distillation process that produces gasoline and a welter of chemical by-products.

But this isn't all. Already a number of industrial firms are beating the gasoline shortage by installing wood-burning tanks on their motor trucks to produce combustible gas for their motors.

It works, developing fully 70 per cent of the horsepower developed by gasoline and without any major changes in the gasoline engine. About one and three-quarters pounds of hardwood chips are required per horsepower hour. A cord of hardwood leaves but sixty pounds of ashes, while a ton of hard coal leaves more than two hundred pounds.

Who knows, perhaps we will revert to coal and wood for efficient horsepower in this gasoline age. What difference does it make? It all comes originally from the stored-up energy from the sun. All man must do is supply the proper catalyst for efficient conversion or utilization.

SO SOY, EXCUSE PLIZ!

YOU have doubtless noticed the increasing publicity given to the lowly soybean in the realm of food. According to Professor Paul R. Burkholder of Yale University, no less than five common varieties of the soybean have greater vitamin concentrations than wheat and are able to compete on even terms with lean beef and lean pork.

For example, thiamin, called the morale vitamin, is more abundant in ripe beans, while riboflavin is more highly concentrated in the green beans. Which gives us a nice choice of these two vitamins, as the beans can be eaten either way.

Can you beat that? The lowly soybean which has come out of the Orient now proves a most palatable food item and rich in the seven health-giving vitamins. And for centuries the little yellow dwarfs of Nippon have been content with a diet of rice and fish while untold benefits lay unheeded almost beneath their noses.

THOSE VITAMINS AGAIN

BEFORE we drop the subject of these "busy little fellows" let's consider the boom in deep-sea fishing. The soup fin shark so beloved of the venerable Chinese has come into his own with his liver. There is enough vitamin A in the liver of one such shark to supply the needs of one human

being from birth to the age of eighty, plus.

Without going through a review of the sources of the various vitamins (outside of the neighborhood pharmacies and the drug counters of department stores) let us consider the fact that, although highly exploited today, the discovery and use of vitamins is not new. For instance, long before British tars became known as limeys because



they were fed limes and lime juice on English sailing vessels to prevent scurvy, the American Indian was prescribing vitamin C for the same purpose.

Dr. Maurice Donnelly of the U. S. Soil Conservation Service points out that Jacques Cartier, the French explorer, had his men dying around him of scurvy four hundred years ago. In his desperation he was amazed one day to note an Indian in the party who had been as sick as the others was now almost fully recovered.

Upon questioning, the Indian calmly explained that the red men always made a tea of the leaves of a certain evergreen to correct this condition.

Cartier at once tried the remedy on his surviving followers. In a few days they had used the foliage of a large tree and were fully recovered. Without knowing the modern scientific reason and name for it, the American Indians long ago found the source of vitamin C in ordinary pine needles.

"HOW DOOTH THE BUSY LITTLE BEE —"

IN ORDER to amass just one ounce of honey a single bee would have to visit several hundred thousand flowers, a feat utterly impossible in the lifetime of one insect. But working together in a communal hive thousands of bees amass a considerable store of this delicacy every season. And, strange perhaps to relate, bees are not always above the temptation of hijacking.

Bees have been observed to raid other hives for honey. The penalty if caught is death, but this does not deter hardy buc-

caneers who, if successful, stand in high repute at home and frequently lead other raiding expeditions.

The method of detection is by "smelling" out a different hive odor about the bold raider.

And what do we care about the domestic and international squabbles of bees? Everybody may not like honey, but science as yet has found no suitable substitute for beeswax. Almost all types of ammunition, from rifle cartridges to sixteen-inch shells, are coated with this substance.

Why? Because beeswax does not expand in tropical heat nor crack and break down in airplane guns in the terrible cold of high altitudes.

JACK FROST'S SECRET

IN A previous group of Scientifacts we discussed the new electrical gadget to identify and match the varying shades of colors. Now comes the amazing announcement that man can perceive no less than ten million different colors within the light range of our visible spectrum. Trained observers, working with no other implement than the naked eye and ordinary daylight, have to deal with some two million color variations and shades in their line of work.

All of which is too complex for most of us. Let us deal with the more primitive colors that Jack Frost spreads around the woodland with the coming of King Winter.

The splendid, vivid colors of autumn leaves are present in the foliage all summer long. The bright reds and yellows are due to the carotin pigments, while the various purples are soluble dyes dissolved in the sap.

We cannot see these flaming, barbaric colors because of the preponderous amount of green chlorophyll pigment which masks all the other hues. Only with the coming of autumn and the touch of Jack Frost does the green chlorophyll break down into colorless components and permit the flamboyant reds and yellows and purples show themselves.

Hand me my rainbow glasses, Watson; I'm going color hunting in July!

GAS TURBINES

RIIGHT now it really looks as though the recently won victory by diesel motors over steam engines will be short-lived. The latest rival in the bid for power is the Gas Turbine Locomotive. The present experimental models burn oil, but coal-burners will shortly be ready.

The gas turbine, driven by the expanding

gases, drives a generator which supplies electricity to motors in the driving wheels. It runs at a very high temperature, but uses neither boiler nor water.

It works now at a 1000 degrees' temperature, and thermodynamical experts have found out that it delivers greater efficiency the colder the surrounding atmosphere. If such a locomotive could be driven at, say, the 35,000-foot level where the temperature is about 75 degrees below zero Fahrenheit, there would be nearly a fifty percent increase in efficiency.

But airplanes flying at that high altitude where the air is so thin must use huge superchargers to compress air to sufficient density for their carburetors.

This fundamental problem is automatically overcome in the gas turbine. A supercharger is not an accessory; the engine is more than half supercharger to begin with. And since the gas turbine delivers greater power at stratosphere heights, and there are no pistons, valves, cams, rods, etc., such as are essential parts of expensive airplane motors, it looks as though the gas turbine is the long-dreamed answer to a rotary engine.

This marvelous engine, primarily designed for railroad use, is already being tested in the air above closely guarded test flying fields.

Gas for fuel in a turbine engine of few working parts! The day of the flying locomotive seems to be dawning. And it will run on gas. Quick, you grease monkeys, stick a politician into the fuel tank of my sky buggy; I want to make a thousand-mile hop.

IRON MEN

WHOMO has not heard of anemia? How many of us have not had to take a few daily drops of tincture of iron during



some period of our childhood? Who in the world doesn't know that iron is the basis for the red color of blood?

But here is one fact about iron that is not generally known. One of the most essential

minerals needed by the human body, although comparatively slight in quantity, iron is one element which upon entering the body never appears to come out. Other salts, minerals and compounds which are taken into the system are excreted in greater or lesser degree, varying according to conditions and circumstances. Iron appears to be the one perfect exception. When you ingest iron, it stays with you.

Much of the retained iron is stored in the liver. In aged persons many brain cells accumulate iron. (Maybe this is what makes some people so hard-headed.) The question now raised is, what becomes of the excess iron in our bodies? And here's where some of it may go:

According to Drs. Stephen Rothman and Peter Flesch of the University of Chicago, that flaming red color of hair so admired by artists of the Titian school comes not from gold but from iron.

True redheads derive their hair coloring from the essential mineral—in intricate compound, of course, with other substances—iron. What happens to excess iron in blondes and brunettes is not yet known beyond the usual storing up in liver and bones. But give my scalp a quick examination, please, Doctor; I'm beginning to feel a bit rusty.

WHO SCRAMBLED THIS?

THIS month's feast of facts concludes with an omelet. The subject, pupils, is—eggs!

Who hasn't heard of eggs, from the Chinese powdered variety to those laid by comedians in lieu of jokes?

Eggs—the white, parchment-like skin just within the shell of which contains the same chemical ingredients as snake venom—are more than the seeds of life, a pleasant breakfast for you and a day's work for the hen. In the same food class as meat, almost sheer protein, eggs are also a source of vitamins.

Biotin, a member of the B-Complex family and now synthesized at a cost of about four million dollars per ounce (when an ounce



will have been produced) was once procured from eggs.

It took one-fourth of a ton of Chinese egg yolks to yield a fraction more than one milligram of crystalline biotin. (There must be an easier way to work this problem!)

Research men believe dehydration, chemical and physical preservation of food, and so forth, will give us fresh eggs which are months old, and in the near future. They can already produce an egg with as high a content of vitamins A and D as a dose of cod liver oil.

And there is the new commercial method of breaking and freezing eggs in molded bars, a sort of segmented arrangement by means of which accurate amounts of egg can be measured and cut off as needed, and the bar replaced in the refrigerator to be kept indefinitely. Fresh eggs by the foot, or inch.

Fresh eggs, powdered eggs, vitaminized eggs—there's one thing science hasn't been able to do with them. No mechanical device has yet been invented as a substitute for a human nose and eye in telling a good egg from a doubtful one in an egg-cracking plant.

Which makes this a fowl state of things, what?



Jim Downing and a Courageous Girl Battle to Save the World from a Strange Destructive Science—in THE GREAT EGO, an Amazing Book-Length Novel in the Spring issue of Our Companion Magazine, STARTLING STORIES—Now on Sale, 15c Everywhere!



"Morganal!" Merrick gulped in surprise

GAMBLER'S ASTEROID

By MANLY WADE WELLMAN

Patch Merrick and Zaarrgon Try to Win a Stake in Order to Escape the Vengeance of a Dazzling but Dangerous Beauty!

THE asteroid Hector was once a jagged space-crumb with few attractions, little gravity and no atmosphere whatever, but a shrewd Venusian opportunist changed all that. He had encased the tiny world in glassite and artificially speeded up an already lively spin. What fuel fed his atomic turbines was a mystery, but it was powerful stuff indeed. Centrifugal force did the rest. The glassite sheath prevented the oxygen from escaping and the glass-

ite served as a transparent floor for visiting gamblers.

Gambling supported Hector. There were cafes, entertainers, luxury apartments, but gambling drew the crowds. Many fortunes were lost at Hector's tables, and not so many won. Even king gamblers came to brief. And big Patch Merrick, for all his many skills, was no king gambler.

He stood at a silvery table in the main salon. From somewhere seeped Venusian

chirp-water music. A Martian joy-lamp shed stimulus-rays overhead. The televisos on the walls presented a variety of spectacles—formalized comi-tragedy for Martians, Terrestrial news events for Earthmen, and an attitude dance by a Ganymede girl for outer planet inhabitants. Under the glassite floor whirled Heaven's star-sparked abyss. In the midst of this splendor, Merrick wagered his last value-units.

"Play" chorused the fringe of gamblers. There were froggy Venusians, Terrestrial junketers, Jovian colonials of varied descent. Only Martians, who sometimes read minds, were excluded from play. They only watched, their squidlike bodies metal-harnessed beneath their robes, their flowery craniums nodding, their artificial larynxes slurring amused comment.

All were gaily dressed save Merrick, whose space-togs were serviceable but sober. Unique, too, was his size—he was as big as a man can get without being a giant, and ruggedly built. He had shaggy black hair and a square, fighting face.

Indemnity was the game, simple but fast. From a deck with four suits and fifteen values, one card was dealt to each player. Then each took or refused successive deals. A card of another color than his first retired him, but if they continued the same color, red or black, he totaled them. When all were satisfied, showdown followed. Highest total won.

SWIFTLY the Venusian dealer's webbed fingers flipped the cards. Merrick drew a club seven. He passed as the second deal progressed, but he drew a diamond four and retired, while luckier players called for a third deal.

"Fortune can't stand crowding," he told the little Martian Zaarrgon behind him. "That's all. We haven't enough left to buck another hand."

Zaarrgon stirred his tentacles. "That iss that."

Merrick and Zaarrgon were fugitives from the vengeance of the Martio-Terrestrial League. They had been guilty of sentimentality. Zaarrgon had released

unauthorized water to thirsty desert paupers on his native Mars and Merrick had helped him escape prison. Merrick had forfeited his money, career and the dazzling girl Morgana Conti. Aboard their cruiser, the *Omen*, they had fled to the lawless asteroids, but to make escape sure they needed supplies. Supplies cost money. Therefore they had sought Hector in hopes of pyramiding their funds. And they had lost.

Most of the other players had dropped out. Two only remained active.

"Another—hit me high and hard!" cried a young Terrestrial. He was almost as big as Merrick, but soft-moulded. His black brows were too graceful and his hands disproportionately dainty. The dealer dealt to him, also to the wizened little Jovian colonial who played for the house.

"I'm out," said the Jovian, and the young Terrestrial scooped in his winnings. The deal went to the house player.

"Stakes," announced that harsh gambler. "Thousand for table—same for pot."

"Feeble!" protested the recent winner. "I'm after excitement!"

"You can name stakes for me," snapped the house player, shuffling. "Your pleasure, Mr. —"

"Alabaster," supplied the other. "All right—forty thousand table, forty thousand pot. Last hand, eh? And pot goes to high total on all hands? I'm high total so far. Nine hundred forty."

Merrick scowled. His own scores though not winners, had been good. He totaled nine hundred twenty-nine, second highest. If only he were still in the game! But he had a scant two thousand units left. Others, too, were being forced out by the high stakes. Alabaster snickered.

"We're the only ones who don't Welch," he snickered to the house player.

"I never Welch'd yet," spoke up Merrick. "Zaarrgon, shall we try it?"

"No player allowed advice from Martians," interposed the Jovian.

Zaarrgon spread his tentacles. "My partrnerr may follow hiss own inclina-tion."

That was enough for Merrick. "We have a cruiser in the landing lock. Name of *Omen*, fancy long-shot speed job. Know her?"

The Jovian nodded. "The house will lend on her, up to eighty thousand."

"She's worth twice that, but credit me and deal."

A hush fell over the watchers. The dealer slid out three cards. Merrick had a twelve of spades. Alabaster beamed over his card. The house man's face was inscrutable. "More?" he asked.

"Plenty more!" crowed Alabaster. Merrick took his second card—club seven. He was still in. So was Alabaster. So was the dealer.

"Again!" urged Alabaster.

Merrick picked up his third card. He felt like a fool. Even if he won table stakes he'd be only forty thousand ahead, not really enough to outfit. And to win the pot he must overcome a lead of twelve. His card was a spade trey. Alabaster cursed shrilly and threw down his hand, stamping away.

"Retired him," growled the dealer. "Another card?"

Merrick shook his head. "Show down."

"Twenty-one here," said the house-player.

Merrick laid his cards face up. "Twenty-two."

Applause. The houseplayer smiled tightly. "You get your cruiser back and plenty. Forty thousand over from table stakes, and two hundred nineteen thousand pot. Almost two hundred sixty thousand. Another round?"

Merrick shook his head. Zaarrgon pulled him away, shaking happily.

"Now where?" Merrick asked.

"Asterooid eighty-H. The sstation therre charrgess double forr ssuppliess. But we can afforrd that. I have a lisst."

"Pardon!"

THAT was the shrill voice of Alabaster. His jaunty arrogance was gone. He was catching up to Merrick.

"Look, I need that money I lost."

"So do we," growled Merrick, but Alabaster caught his elbow.

"I'm serious. That was expense

money." He paused, beating his palms together. "Now I'll be an embezzler. The Contis will have me arrested."

"Contiss?" repeated Zaarrgon sharply. "Quick, Patch, Brring him to ourr sship."

They headed through crystal and silver corridors to the landing-lock. Zaarrgon was purposeful, Merrick mystified, Alabaster plain wretched. The *Omen* cuddled in her slot, a sleek gray cigar of power. Merrick chilled to think how he had risked that beautiful craft.

In the control room, Zaarrgon motioned Alabaster to a bench.

"Sspeak, with no liess," he cautioned. "What arre you doing forr Coburrn and Morgana Conti?"

Alabaster gulped. "Tracking a Martian and Terrestrial named Merrick and Zaarrgon."

"We know them. Do you?"

"Only by description," confessed Alabaster. "Zaarrgon's due to be executed, I think."

"And the Terrestrial?" prompted Merrick. "Same fate?"

"Worse. Morgana Conti wants to marry him."

Despite himself, Merrick fidgeted. "You know her?"

"Since we were children. Morgana's a vision, but the fiercest, deadliest creature on all the habitable worlds. She'll murder me when she learns I gambled away my expense money."

Zaarrgon shook his chrysanthemum cranium. "Thiss iss the sstrangesst detective I everr met."

"I'm only a family friend of the Contis, down on my luck. So she gave me this job. The fugitives were headed this way, and I needed the reward. Now I've failed."

"You shall have yourr money back," cut in Zaarrgon.

"What?" protested Merrick sharply.

"Thosse you sseek," Zaarrgon continued, "went towardd the Jovian moonss, brribing people herre to ssay nothing. The money, parrtnerr."

Merrick glumly counted out eighty thousand in big bills. Zaarrgon waved Alabaster's whimpering thanks aside. "Head for Cerress, take a linerr for

Ganymede there. Good luck. Go."

When he was gone, Zaarrgon turned to Merrick again.

"Sstop glarring. We sstill have plenty. It wass worth the prrice to hide ourr trail like that. We'll stay in the Assteroids, underr no plantetary authority."

"Of course." Merrick remembered the cloud that obscured the questional of asteroidal origin and right to control and colonize. "But even among the asteroids, any patrol craft can pick us up."

"That sspy wass ssent afterr uss. The chasse iss being kept ssecreet by the Contiss fort ssome rreasoon. Yess, we musst go."

"Sorry, gentlemen," boomed a great voice. "No."

Someone had used a picklock ray to get in. Two armed men covered Merrick and Zaarrgon. The third figure was a great frog-shape, bulge-eyed and platter-lipped, Venusian and glittering.

"I'm Lirog, the master here," he boomed. "We put a detecto-receiver on you when you started talking. You're Zaarrgon and Merrick. You're under arrest."

Hector, as an independent government, had prison cells and generally people in them. Zaarrgon and Merrick lounged in a metal-lined stall hardly bigger than a coffin. It danced and quivered to far-off vibrations.

"Deliver me from Martian wisdom," Merrick scolded. "If we'd left at once, we'd be in the clear."

MERRICK'S words had no effect on the Martian.

"The vibration," murmured Zaarrgon, "sshows that we are nearr Hector's center, the mechanissm that heightens the rotation-sspeed."

"Why did you bother with Alabaster?"

"Hector iss ssself-ssufficient," went on Zaarrgon to himself. "The fuel musst be atomic, found native herre. It musst be densser than rock, lead, gold."

"If we'd left Alabaster alone, he'd have failed."

"And Morgana Conti would ssend out a morre capable purrsuer," retorted Zaarrgon. "Patch, I am ssorry. I had

hoped to help. I sstill hope to do that."

"But we're stuck. This is like the inside of a safe, and we'll never escape."

"You are right," someone said.

Outside, Lirog, the Venusian gambling lord, was peering in at them. Attendants pushed along a great televiso apparatus on a truck. They moved it around so Merrick and Zaarrgon could see the screen. Lirog turned a dial, and a melodious whistle began.

"Sselective rradio," commented Zaarrgon. "For prprivate communication."

"You guessed it," said the Venusian, and the screen lighted up.

Merrick started. He saw the image of an oval face, red hair, gray eyes, regal shoulders. "Morgana!" he gulped.

The Venusian chuckled deeply. "Miss Conti," he said in his own transmitter, "Are these the persons you seek?"

"They are," came Morgana Conti's icy reply. "I double the reward. Wait for me. I'll come for the prisoners personally in my ship."

"A deal!" Lirog flicked the televiso off, and turned a frog grin on his captives. "Hear that? Better than police arrest, eh?"

"Listen," said Merrick. "We have a hundred and eighty value units—right here in our pockets—"

A webbed hand snapped its fingers. "Small change. Miss Conti would top anything you could offer. Don't be silly. Good day for now."

Lirog left. The attendants pushed the apparatus away.

"What will Misss Conti do with me?" mused Zaarrgon.

"Something not at all nice," growled Merrick. "I'd like to break Alabaster's neck."

As if conjured up, Alabaster appeared in the corridor outside.

"Any favors you'd like?" he snickered in at them. "I'm really in funds now—coming in for a share of what Morgana pays." He studied Merrick. "You're not as Morgana pictured you. I expected something scrubby and coarse."

Merrick swore. "Temper!" warned Alabaster. "Blood pressure!"

The guard laughed and turned away.

"Hector's a pleasure center," sneered Alabaster. "But you two don't seem to like it much. All Merrick does is swear."

Putting his hands on the bars, he continued to jibe at them. Behind him, Zaarrgon slid a tentacle through the bars. Protruding loosely from the guard's hip-pocket was the pistol-butt of a rust ray. The Martian seized it gently and brought it in. Neither the guard nor Alabaster noticed. Finally Alabaster departed with a final wave of his hand.

At once the Martian pointed the rust-ray at the massive lock housing. A pale finger of radiance spurted. The lock fell away in clangling fragments. At the same moment, Merrick threw his weight against the door, dashed it open. Before the guard had time to be surprised, Merrick had seized him and knocked him unconscious with one mighty blow of his fist.

As Merrick eased the senseless man to the floor, Zaarrgon already was heading down the corridor, beckoning with a free tentacle.

The corridors beyond were narrow, dim and musty. Zaarrgon led the way through one, then another. He took a turn leading to the humming engines. Merrick caught up with him as he paused beside a great stack of drums.

"Fuel," Zaarrgon said. He bent his cranium close, all its sensitized petals twitching. "Metallic, massive—Patch! This is mosst ssignificant!"

ZAARRGON'S words puzzled Merrick.

"Why?" he asked.

"Don't you ssee?" Zaarrgon gestured eagerly. "Thiss little worrlid, Hector, wass once the corre of a grreat planetary body!"

Patch forgot their perilous position. "Scientists have suggested that. If this is one bit of a hard-packed planet-center, there are others. If the dense atomic-fuel can spin this little asteroid we might refine a fuel good enough to carry us beyond this System to safety. We'll have to get away from Hector first and we can't clear unless they open the locks and slide the *Omen* out."

"Cant we? Pick up two drrumss of that fuel. Follow me."

"Where?"

"I judge that we arre within the ssection wherre ourr crruiser iss held. Come."

The two who watched by the *Omen* were not guards, only attendants, lolling and wishing that relief would come. A stern Martian voice fell on their ears.

"No move—no ssound;" it said. "Orr you die. Patch, it might be ssimpler if you sstunned them."

A big form set down a clumsy burden, and struck twice, swift and hard. The two attendants subsided into peaceful slumber.

"Drrag them into the next corrridor—sso. Now, put the fuel-drrumss between the inner bulkhead and the *Omen*."

"How can we work the big lock-entry and the space catapult?"

"We won't." Zaarrgon's rust-ray cut great scoring lines in the metal framework of a glassite pane. "That will weaken the fassteningss. Quick, get in-side."

Merrick did so. He was beginning to trust the masterful methods of Zaarrgon. The Martian followed, turned and spurted a ray at the two drums through an open port.

A mighty blast sounded. Merrick fell and rolled. Zaarrgon closed the port, and writhed across to the controls.

"Quick, the televiiso!" he called. "We arre in sspace. That blasst knocked uss throuugh the glasssite!"

Merrick turned the dials. The vision screen showed him Hector, falling quickly astern. A cloudy vapor hung to one point. In a moment little figures in space-armor swarmed into view around the vapor.

"They're busy plugging up the hole," he reported. "Before they can follow, we'll be beyond pursuit." He broke off as a musical note sounded from the whistle. "Someone trying to tune in on us, private."

He twisted another dial. "Cruiser *Omen*," he said into the microphone.

To the vision screen came a red-crowned head and gray eyes.

Patch Merrick scowled. For Morgana Conti's image bore her most dangerous expression, a smile of victory.

"My plan worked," she said in her throatiest voice.

"What worked?" he echoed. "We escaped."

"I wanted you to escape," she told him. "You almost bungled the whole thing, but not quite."

"What do you mean, you wanted us to escape? You sent that sweet-lavender spy to track us down."

"I had to send someone. So I chose the stupidest man I could find. Knowing he can't help gambling, I sent along plenty of money for you to win."

"You fixed that, too!" Merrick growled.

Her red head nodded. "The house player owes us a favor or two. He had instructions to lead Alabaster into a big wager, then deal the right cards to you. But the house player told his boss, who tried to keep you for the League reward. It was hard to get you out of that."

"We got ourselves out," Merrick told her stiffly.

"That's what you think, Alabaster told me everything, on a private televiso. I let him square himself by smuggling a rust ray into the hip pocket of the guard."

"No!" protested Merrick. "We don't owe our safety to that falsetto!"

"You owe it to me." She was suddenly wistful. "Go on, Patch. You couldn't return now, anyway. I'll still have a lot of fixing to do, and you're hot for adventure. Later, when you're tired out, I'll see you again."

THE mechanism clicked, the screen went black. Morgana Conti had dialed him out.

Merrick stared at the dull, empty rectangle, heavy jaw on heavy fist. His reverie was broken by Zaarrgon, still at the control board.

"Assteroid Eighty-H firsst," he announced. "Then one of the ssmaller speckss. One with an intrriguing sstrangeness, which—why arre you moping?"

"I'm not moping," said his friend. "I'm only thinking about Morgana—about several things."

"I'm trrying to tell you about thiss little assteroid. Perrhappss it will give anotherr clue towardr ssolving the riddle of assteroid creation, the greatests myssterry of the univeerss."

"Greatest mystery?" repeated Merrick. He stared again at the screen where Morgana's face had appeared and vanished. "I wonder."



Follow the Exciting Adventures of Curtis Newton and the Futuremen in DAYS OF CREATION, a Complete Book-Length Novel by Brett Sterling in the Spring Issue of

CAPTAIN FUTURE

Now on Sale—Only 15c at All Stands!



ROBERT L. RIPLEY



It Didn't Pay

By ROBERT L. RIPLEY

Famous Creator of "Believe It or Not"

A SHURBANIPAL of Assyria, the richest man who ever lived, was worth a trillion and a half dollars—75 times as much gold as is held in the United States Treasury. Yet it availed him nothing! Neither he nor his son had the sense to use its wealth for the good of their people or for their protection.

And so it was comparatively easy for Nabopassar and the King of Medes to invade Assyria and enslave it. And finally, when defeat stared the great King in the face—when it was too late—Ashurbanipal, in terror, had a tremendous platform built of polished wood in the City of Nineveh, and on top of this he heaped all of his wealth—142,000 tons of gold in 2,500,000 bricks (or ingots), each brick 7 by 28 inches in size, and each brick valued at 50,000 dollars.

This treasure formed a pyramid of shining gold nearly one hundred feet high, and in the intervening spaces he placed all of his jewels and personal belongings—his wives on golden beds—his children—even his pet dog.

And then a great quantity of oil was brought from Mosul and poured on top of this golden mass, and when the torch was applied, the King

himself walked in and laid himself down among his wives—his family—his pet dog—and everything he valued in life. And so the great Ashurbanipal, the richest man in the world, was consumed in his own wealth—he immolated himself and became part of this great conglomerated melted mass of money—and so ended the Empire of the Assyrians. And it never rose again.

Why?

Because Ashurbanipal, who had practically all the money in the world, didn't do anything with it! And he and his country were lost.

What are we going to do with *our* money today? Enemies threaten us the same as they threatened Ashurbanipal in 7 B.C. The United States of today, like the Assyria of Ashurbanipal, is the richest nation in the world. What will it avail us?

Nothing more than it did Ashurbanipal unless we do something with it. And there is only one thing to do—and that is to *Buy Bonds* and *War Stamps* and make our money directly available to our country—help our country—otherwise it will become a melted molten mass and we the people will be destroyed as Ashurbanipal was destroyed long years ago.

ASHURBANIPAL'S WEALTH COULD NOT SAVE HIM!

BATTLE OF THE SOLAR SYSTEM

By RAY CUMMINGS

Hearing of a Dastardly Plot to Wreck the Universe, Tubby Heroically Goes to the Rescue — Armed With a Potato Knife!

TUBBY'S girl was sitting in a wheel chair, tonight, beside her bed in the hospital. In the morning she would be well enough to leave. Gladys was a swell girl, a fluffy blonde with curves all in the right places. Tubby admired cleverness, too, and Gladys was smart. Though only nineteen they had made her head of the candy counter in the Five-and-Ten.

"You're looking swell, Gladys," said Tubby. "So the busted ankle is about well, eh?"

"She looks tops," cut in Jake, who was with Tubby, before Gladys could answer. "Brought you a present," said Tubby as he and Jake sat down on the little white chairs. He handed her a book. "Sort of a going away present," he grinned, "on account of you're okay now and leaving here. Book on astronomy."

Tubby thought the book was wonderful. Before coming to the hospital he had spent an hour looking it over. Gladys rifled the pages.

"Oh—thanks," she said in doubtful tones. "Thanks a lot, Tubby."

"Nothing like improving your mind," Tubby beamed. "Oh, and that reminds me. I must go now, Gladys."



Tubby and Sir Newton fled as the bearded giant stopped in front of the cliff

"Go?" the girl said. "Why, you just came, Tubby."

Girls are funny, Tubby thought. She looked annoyed.

"Oh, that's all right," he said hastily. "I got to hear a lecture just around the corner. It won't take long and I'll be right back. I can't miss that lecture, Gladys."

"He's nuts on lectures," Jake put in helpfully.

"So I brought Jake to sit with you," Tubby explained. "Won't be long—"

"Lecture on what?" demanded Gladys, an ominous set to her lips.

"Astronomy. It'll be a swell lecture about the Solar System and everything. Too bad you can't come. But you an' Jake can read that there book."

"Thanks," Gladys agreed coldly. "And if you don't show up, that'll be all right too."

Her remark sounded sort of sarcastic, but Tubby diplomatically ignored it. Invalids sometimes grow fretful. He climbed to his feet, still beaming.

"Oh, I'll be back the minute the lecture is over," he declared. "Got to hurry now. See you later."

HE DID not wait for her parting shot. It was already eight-thirty, the lecture was due to start. Gladys was peeved but that could be fixed up when he returned.

The little lecture hall was only a block from the hospital. It was crowded, but fortunately the talk had not yet begun. Tubby shoved forward along the dim aisle looking for a seat. Then he saw one still vacant, up on the stage-like platform. Pantingly Tubby climbed the little ladder steps, up twelve or fifteen feet and raced another spectator to the coveted chair.

Reaching it first, Tubby settled down.

"Swell," he murmured to himself. "Now I'm all set."

He was high up, right at the front edge of the platform, with his back to the audience. The lecturer was only ten feet away, beside a table on which complicated scientific apparatus was arranged. The lecture would deal with

the Celestial Mechanics of the Solar System. Deep stuff.

Tubby gazed with eager interest. The apparatus on the table consisted of little steel balls poised at the top of incline runways. Next to these Tubby could see a rod hanging on a wire, with a ball at each end of it and a ball pierced by a rod, tilted at an angle, with an electric light bulb shining on it. All this looked interesting, but somewhat meaningless.

Then Tubby gazed upward. Ten feet above the big platform hung a complete model of the Solar System in midair.

The lecturer was now getting underway.

"Ladies and gentlemen," he began, "my subject this evening is the Celestial Mechanics of the Solar System. I want to show you with what amazing mathematical nicety the celestial forces are balanced, one force counteracting the other. Each one depends upon the other. A famous poet once said, 'Thou canst not touch a flower without troubling of a star.' That is literally true, my friends. And how romantic this thought seems to us."

"There was a time, not long ago," the lecturer went on, "when most of the learned men on Earth ignored the earlier findings of the Greeks and conceived a false conception of the mechanics of the Universe. Ptolemy, an Egyptian of the second century, A.D., outlined the mechanism of the Universe as he believed it to be.

"Until a few hundred years ago, everyone accepted it until Sir Isaac Newton discovered his Law of Gravitation and confounded them. Ptolemy thought the Earth was an immovable globe in the center of the Universe, with everything else revolving around it. That's how it looks, and so that's how he thought it was."

How silly of Ptolemy! Tubby smiled to himself. Even a dumbbell knows the Sun does not revolve around the Earth.

"Tubby, please!" came an urgent whisper in his ear.

He felt a hand twitching at his sleeve.

"Tubby, please," went on the voice. "I've been looking for you everywhere."

Step outside for a minute."

Turning his head, Tubby saw a man had moved up beside him, a man in shabby black clothes, with his hat in his hand.

"Me?" Tubby whispered. "Go 'way. Can't you see I'm listening?"

"It's terribly important." The voice trembled with excitement. "I need help. I've been looking for you because I can't make the trip alone."

The man sounded so insistent Tubby felt impressed.

"What's the matter?" he murmured. "The cops after you? Listen, you shouldn't butt in here. Hide some place else."

"Don't waste any more time listening to a bunch of nonsense," the stranger's low voice was contemptuous. "That lecturer is a fakir. He only knows what he's read in books. I'm a Gravity Professor. I'm authentic."

"The real McCoy," Tubby said. "Am I right? An' you were looking for me because you got trouble?"

"Terrible trouble," the stranger insisted. "But we can't discuss it here. Please come outside."

Already he had pulled Tubby out of his seat, and they were heading for a side exit door.

"What kind of trouble?" Tubby demanded.

THE PROFESSOR was a tall, thin man with scraggly grey hair. His face had sunken cheeks, a big nose and a scrawny, protruding jaw. In his black clothes he looked like a grave-digger.

"It isn't just my trouble," he whispered as they went out the door. "It's mine, yours, everybody's. Everyone on the Earth, or anyone who's living on any of the planets, the whole Solar System."

That sounded like a bunch of headaches. "And we've got to fix it," Tubby said. "Right, Perfessor. What's on the program?"

"I found out there are two men who are plotting to destroy the Earth—and all the planets," said the Professor. "Our task is to stop them from doing it. I

couldn't make the trip alone. We must hurry to my laboratory at once."

Two men who were going to wreck the Earth and all the planets—going to wreck the whole Solar System. At first the idea sounded crazy until Tubby realized a man of science might know facts of which he was ignorant. Obviously the Professor was terrified. They were in the street now. The Professor had jammed his battered black felt hat on his head and was walking fast, with Tubby panting beside him.

The laboratory was not far away, only at the end of the block. They went through the doorway, into a dark room where the Professor fumbled for the wall switch. Then light flashed on. It struck Tubby as a mighty queer laboratory. There was not a thing in the place except a rumpled bed and a small board table on which a little hooded gadget stood with a number of wires dangling from it.

"That's my myrdscope," explained the Professor. "My space-size ship is out in the garden. Everything is ready. Come on. We'll have to hurry."

"But where are them villains, Perfessor, who are going to destroy—"

"Out there on one of the planets," snapped the scrawny savant. "I, saw them plainly in my myrdscope, heard them plotting. Luckily they wrecked their space ship which looks something like mine, the copy-cats. The accident marooned the scoundrels and if we hurry we'll be in time before they can repair it."

"Before they can get it fixed," Tubby agreed. "Right you are. Come on. What're we waiting for?"

The Professor snatched up the myrdscope and headed for a little door at the side of the bare room. Outside in a skimpy garden, pallid under the starlight, the Professor stopped, with Tubby beside him.

"Here's my space-size ship," the Professor said. "Food, water, equipment, you'll find everything's in it. All my life I've worked on this magnificent vessel. I was just planning an experimental trip when I saw and heard those

miserable villains out there planning to wreck the Solar System. Oh dear, you can imagine how indignant I felt."

The Professor certainly seemed excited. Tubby realized somebody would have to be practical and clear-headed in this adventure.

"Okay, Perfessor," he said. "Don't worry. Let's hew to the line. Show me the ship."

Tubby could see no spaceship in the garden, just flower beds and shrubbery. The Professor put his myrdscope on the ground and lighted a match with trembling fingers. "Here's my ship," he said proudly. "Isn't she a little beauty?"

"Little" was exactly the right word. Tubby stared down amazed. In the flowerbed at his feet, with pansies growing around it, stood a tiny space-ship. The light of the flickering match glowed upon it, a white cylinder, about two feet long.

"I purposely built it small," the Professor explained. "Less materials were required that way. It saves food and things, too. Why only a few crumbs of bread and a few drops of water are required. All to scale. You see?"

Tubby eyed the miniature vessel and scratched his head. Economy was a good thing, but this seemed carrying it a little too far.

"We're going to make a trip in that?" Tubby murmured.

"But of course we are," the professor insisted. "The essence of my problem was to devise a spaceship which would travel in Space, and also grow large in size. A ship to become gigantic, to negotiate, by virtue of its size, the immense inter-stellar distances."

MORE deep stuff. But Tubby hewed to the line with a short-cut.

"So that ship will get big," he said, "and when it's the right size for use we get in it and go. Right?"

"Exactly right. Watch." The Professor bent down and touched a little lever on the tiny spaceship. "I've solved every intricate problem of size-change, Tubby—the rapid duplication of the

atoms, a progressive, accelerated enlargement of molecules, without a distortion, without the slightest change of shape."

That sounded like an intricate problem, but the practical result was simple enough. The little spaceship began to grow. A faint throbbing hum came from the hull and a pinkish electric glow bathed the sides. Within a minute the vessel had shoved itself over the flowerbed, over the garden path, and become a ten-foot cylinder taller than Tubby's head. He could now see rows of glassite bullseye windows, an observation control tower on top near the bow and rocket-stream vents in its side-fins and spreading tail.

"Hey, cut off the juice, Perfessor. Let's get in."

Within a minute the ship had swelled to a size where it had crushed all the garden. Quite a wreckage, but all in good cause. Tubby and the Professor had backed over by the garden fence, with the bulging side of the ship towering near them.

"Yes, yes, I'll stop it. Don't get excited, Tubby." Plainly the Professor had become somewhat rattled. But he did manage to jump on one of the fins and shove the lever which had grown so big now he barely had the strength to manage it. The hum stopped. The pink glow faded.

"Swell," Tubby said. "Now let's get aboard. When we're inside, we get big, too, as the ship grows?"

"Yes, of course. From now on we keep pace with the ship."

"Okay," Tubby said. "Here we go."

They climbed into a lower port and slid it shut after them. The metal corridor was dark. Tubby followed the Professor along passage, up an aluminum winding staircase and into the control room. Here intricate mechanism met his gaze but the Professor seemed quite at home. He put his myrdscope on a table and seated himself at the controls.

"We'll start with space-change only," said the Professor. "I'll neutralize gravity by means of the anti-grav plates of

the hull, and start the rocket-streams. That will raise us."

It did. Tubby could see noiseless jets of fire hiss from the hull-vents and the tail. Smoothly the humming ship lifted from the wrecked garden and slid silently up into the starlight. The earth dropped away. Within a few minutes they were up in the stratosphere.

"And now the size-change," the Professor murmured.

That was all the warning he gave Tubby. The size-change mechanisms went into operation with a jarring thud. Again pink radiance flooded the ship. Tubby's head reeled, as if he had swallowed a pint of raw whiskey at a gulp. The Professor emitted a yelping squeal as he and Tubby went sprawling on the floor.

For a while Tubby's senses were fogged. But Tubby still had enough mind left to realize it would not do for them both to fall into a stupor, not with the ship up here beyond the stratosphere with nobody to guide it.

"Come to life, Perfessor. Get on the job," Tubby warned.

"Oh dear! Oh dear! Who would have imagined *adjustification* would be so bad as this."

Luckily "*adjustification*" did not last long. Tubby's head steadied. He slid into the control seat. The ship seemed to be all right. Outside the bullseye windows, he could see the round Earth far down, with the Moon off to one side with millions of stars glittering behind against a black background.

But still somebody ought to be in control here. A man cannot know everything and Tubby had not the remotest idea how to work these levers.

"How can we foil them villains and rescue the Universe if you do nothing but sit on the floor?" Tubby demanded of the Professor.

THAT did the business. The Professor stood up and staggered to the table.

"You're right, Tubby," he said. "Where is my myrdscoope? Oh dear, my head is bursting."

Tubby handed him the myrdscoope.

"What you want that for? Get busy now, guide the ship. Which way are we supposed to go? Where do we find them inter-spatial roughnecks?"

The question flabbergasted the scrawny savant. He stared at Tubby blankly.

"Oh dear, I don't know," he admitted. "I never thought that far ahead—how to find them. They might be on Jupiter, Uranus, Saturn, or perhaps on any of the billion billion other planets of some other solar system." He smiled in a weak fashion. "It might prove something difficult to figure out, eh?"

Even the cleverest man can be nonplussed. Almost Tubby felt at a loss. A million galaxies of whirling spheres and a trillion centuries of human progress hung in the balance while he scratched his round hard head.

"You don't know where them virulent rowdies are?" he gasped.

The Professor's face cleared.

"They are in a stone tower perched in front of a cliff, with rocks nearby," he said helpfully. "The tower is round and long and the rocks are brown. Oh, yes—overhead the sky is black."

"That ain't what I'd call too specific," Tubby said, rumpling his hair once more. "It might take kind of long for us to make all the rounds, searching."

"Why not have a look at the scene in my myrdscoope," suggested the savant. "Maybe that'll help you to identify it and then you can suggest a way to get there."

"Give me a look."

The myrdscoope would not work when aimed toward the Sun which ruled out the Sun, Venus and Mercury, all the little asteroids in between, and all the distant stars in that half the firmament. So far so good.

"And Mars is over that way, too," the Professor said. "Now ahead of us there's only a mere billion solar systems."

"Only a billion?" Tubby scoffed sarcastically. "How do you work this dingus."

The Professor sent a current into the

myrdscope.

The image-grid glowed, showing an orange-green scene. Tubby saw a blank night-sky, a tall stone tower, a landscape of boulders, a rocky cliff-face with cave-mouths, like holes in a swiss-cheese.

The Professor insisted he recognized the tower all right, but could not account for the absence of the villains, who even then might be ready to tear Existence into tiny shreds. Off to one side, maybe five hundred feet from the tower, could be seen the wrecked space-size ship.

"Maybe they're working in the ship," Tubby suggested. Then a new idea occurred to him. "Hey Perfessor, what weapons did you bring along to wallop them dastards with?"

Again the Professor stared blankly. "Weapons? Oh dear—I remember, now. I was planning to invent some that would be better than theirs but I'm so absent-minded it completely slipped my memory. Does it really matter, Tubby?"

A gentleman must always hold his temper.

"Maybe not, if we sneak up on them," said Tubby, in ironic tones. "What are they packing?"

"Only super-electronic heat rays," said the savant. "They'll feel helpless if you catch them off guard. But you're so husky, Tubby, a slight handicap won't bother you."

"Okay," Tubby agreed. "We got knives, maybe?"

"Oh yes. In the galley are two potato knives I bought in the Ten-Cent Store."

Better than nothing, certainly. But just the same, dauntless though he was, the situation made Tubby thoughtful for a minute or two.

"Can you figure out where our enemies are?" the Professor asked anxiously.

"Don't know off-hand," Tubby said. "But don't worry. We'll find them pretty quick now."

That proved to be simple, as things usually did with Tubby. The myrdscope would only work when it was pointed at the tower, so all they had to do was aim the ship in that direction and keep going.

HURRYING was the ship's specialty. Outside the control turret, against the black firmament glittering with distant stars, the Earth and Moon had shrunk to the size of a silver dollar and a dime.

Tubby watched them recede. Then he saw red Mars, canals, snow-caps, everything, about as big as a penny, go sailing past, seeming only five miles off.

"That's our size-change," the Professor murmured. "We're enlarging even faster than I had calculated. We're already bigger than the Earth."

To Tubby the Professor's theory was childishly simple, once he grasped the mathematics of it. Their ship had grown as big as the Earth. But in another minute it was twice that large. Then four times. Then eight; sixteen; sixty-four; one twenty-eight; two fifty-six; five twelve. A mere matter of multiplication in which figures mounted fast. A spaceship that doubled its size every sixty seconds would develop considerable speed compared to the paltry distances separating Earth and Mars, or little Jupiter and Saturn. Why, at the rate it was enlarging, its own length would reach from Earth to Mars in another half hour or so. A light year? Pooh—a couple of poohs!

The Professor had grown triumphant.

"Lucky I thought to insulate the ship against centrifugal attraction," he chanted. "Otherwise we'd have the planets of the Solar System trailing after us like paper scraps are sucked under a subway train when it goes whizzing past a station."

Tubby thought the Professor had been mighty considerate to do that. Every inhabitant on Earth ought to have been grateful from the bottom of his heart.

As it was Tubby did not find the journey much more exciting than a trip in a subway train. Had it not been for his memory of those super-electronic heat guns wielded by the galactic chaos plotters, Tubby might even have felt a trifle bored. But the thought of the perils before them kept him on his toes.

He watched Jupiter float by, like a lead colored medicine ball and then, on

the other side of the turret, Saturn skim past, a gleaming ball ringed by an iridescent girdle.

As the ship increased in size the Professor exhibited skill in avoiding the planets. A conscientious man he had no desire to knock any of them to flinders. In quick succession they passed Uranus, Neptune and Pluto.

Now Tubby turned and looked back. He felt rather disappointed with our solar system. It had now become only a third class cluster of satellites dodging around a decidedly mediocre looking sun. Then he turned forward once more. Ahead all seemed different. Instead of dwindling, shrinking, sparks of light, forming themselves into clusters, the stars were opening out, shifting, becoming larger.

Remembering the myrdsoscope, Tubby took a look in the grid. The tower and cliff were still plainly in view. This told a lot to Tubby who was a clever fellow indeed.

"They ain't in the Solar System at all, Perfessor," he cried. "We have a lot further to go before we can catch up with them, the sneaky rats."

That was obvious. But the size-change was taking care of it in a hurry. Little clusters of stars were presently drifting past. Island Universes some of them lens-shaped; spiral nebulae, shrunken little things. One of them sailed past within a few feet of the control tower window. Then the expanding ship ran smack into one of them. That was tough on the little Universe. There was a shower of sparks on the front vizor pane, and that was all. The Professor hardly became agitated by the accident. It was such a little universe.

Half an hour went by. All the universes were clustered behind the ship now. They shrank to dots, faded and then were gone. Darkness prevailed everywhere. But the myrdsoscope still glowed with the tower image. The poor Professor felt baffled. It was no time for Tubby to show indecision.

"Buck up, Perfessor. We're headed right. What more do you want? And

we're going fast, too."

"But where—where are we going? There's nothing left. It's all behind us."

"Must be the Edge of Space," Tubby said. "After empty space ends, there's got to be something. Am I right?"

IVIOUSLY the Professor could not contradict it. As a matter of fact, he presently developed a good scientific explanation. All this vast abyss of Space in which the little island universes were floating, was a relatively small void. Just a matter of comparison, depending on size alone. And this small void was the interior of the atom of something infinitely larger.

"We'll find ourselves on the Inner Surface of a hollow sphere," the Professor said enthusiastically. "Why, it's obvious."

That Inner Surface now was faintly visible ahead of them, a dim radiance that hung in the abyss beyond the bow.

"That's where the villains are Perfessor," Tubby declared. "We're all right now. Only maybe we better stop getting any bigger? Shouldn't we slow up a bit?"

"Yes, of course we should."

The stopping of the size-change mechanisms did not knock them down, but it made them pretty dizzy for a minute. Then the rocket-stream brakes went on. They were applied so powerfully, all the loose objects on the control table, including the myrdsoscope, slid off and crashed.

But the myrdsoscope was not needed now. As they approached the rocky inner surface the Professor turned the ship, so that the surface was under them, and set the vessel lightly down on the shining black rocks.

The little tower standing alone by the cliff proved to be the only building.

Tubby and the Professor at once spotted the wrecked space-size ship lying on a rocky shelf. About it they could detect no sign of life.

"They aren't working on their ship," said Tubby. "They're probably sleeping in their tower."

Just to play it safe, Tubby stuck one

of the potato knives under his belt and handed the other to the Professor.

"Oh dear—I never—never could bring myself to carve a man up," protested the Professor, as they opened a port and stepped to the ground.

The little tower showed dark and grim about a hundred feet away. The wrecked ship was beyond it, to one side. Silence prevailed. Cautiously they started for the ship. They had reached the front of the tower when Tubby made a startling discovery.

"Hey Perfessor, lookit," he whispered. "That tower has a window up there, but there ain't no door down here."

The tower was an amazing structure. It had just one window thirty feet from the ground. How could anyone get in or out? Then Tubby saw where there had been a door, a place which had been walled up recently.

"Maybe the villains are in there imprisoned," he whispered. "Say, that would be swell. Come on, let's smash their ship and make our getaway."

"Oh, are you Earthmen?" A tremulous voice startled the Professor so much he dropped his potato knife.

Up in the window of the tower a man had appeared. He was an old man, so thin he seemed just skin and bones, with long white scraggly hair, and a ragged dirty white shirt. When Tubby looked up the old man waved his skinny arms.

"You look like Earthmen," he quavered in a cracked voice. "If you are, save me. I'm starving to death up here."

"Sure, we're Earthmen," Tubby called. "How'd you get in there?"

"Trask imprisoned me. He walled up the door. I'm Sir Newton Johnson and Trask is torturing me, trying to starve me to death."

"Look out, Tubby," warned the Professor as his trembling fingers gripped Tubby's arm. "He's a liar. He's one of the dirty villains I saw in my myrdo-scope. This is a dastardly trick."

BUT to Tubby this did not seem to be a trick. The old man looked as if he were starving all right. From the window poured forth his troubles. He

had come here with Trask, and they had wrecked their ship in landing.

"Then we got into an argument," said the old man. "We belong to two different schools of scientific thought. He favors the Ptolemy School and I convinced him I'm right and he's wrong. So he said he was going to fix things so he'd be right by wrecking our Solar System. Because of his threats I won't tell him how to fix the ship or tell him where I've hidden the heat ray weapons. I'd rather stay marooned here—"

That meant they had no weapons after all. Tubby felt relieved.

"You know how to fix that wrecked ship and he don't?" he called up to the old man. "Right?"

"Yep," said the prisoner. "Trask is a back number. He knows nothing but ancient stuff."

So there was not any need for Tubby to smash the other ship.

"Oh please, get me out of here," the old man was pleading. "If you're going back to Earth, take me with you."

Something told Tubby the time to go was right now. But no gentleman could let an old man starve to death in a tower. Then again if Trask, the real villain and the Ptolemy disciple, showed his face, Tubby would hand him a crack on the jaw.

"Get me down out of here," Sir Newton kept insisting.

But how? Tubby was equal to it. He whispered to the Professor, and the Professor scurried to their ship and back, bringing with him one of the spare anti-gravity plates, a thin metallic plate about three feet square. Tubby placed it on the ground under the window and hooked its battery to it.

"Don't make any errors, Perfessor," he warned. "Just enough anti-grav current to raise me up to the window."

Clever scheme. The Professor understood it perfectly. Tubby stood on the plate and by a miracle of electronic levitation, slid up to the window.

Then the emaciated old prisoner wound his arms around Tubby's neck and was lifted out of the tower. But at this moment the Professor became

rattled and instead of letting them down easy, cut off all the current from the anti-grav plate and Tubby and Sir Newton landed on the ground, twenty feet below, with a terrific bump. For a moment Tubby saw more stars than he had seen in all the milky way. But old Sir Newton was not hurt; he had landed on Tubby.

"Okay, here we go," gasped Tubby regaining his feet. "Back to the ship, everybody."

"L-let's hurry," Sir Newton stammered. "That villain Trask must be around here."

At this moment with a bull-like roar, a figure emerged from one of the swiss-cheese holes of the black cliff. The new comer was no decrepit old man who would wait to be socked on the jaw. Far from it. He was a giant, six feet six maybe, with black hair and a black beard.

He had a big, spiked metal bludgeon in one hand and looked like a nasty customer indeed.

Tubby rose to the emergency.

"Run Perfessor," he ordered. "Take Sir Newton to our ship. I'll attend to Trask."

As the other men ran, Tubby turned and faced Trask. The giant had stopped in front of the cliff, brandishing his bludgeon.

Tubby waved his tiny potato knife. "Get back in your hole, you dirty rat," he shouted. "G'wan, get back, or I'll carve you to pieces."

That should have scared Trask, but it did not. With another bull-like roar, he came charging forward. But he could not catch Tubby. The ship was not far. The Professor and old Sir Newton had reached it when Tubby came puffing through the port at a dead run. The bearded giant was close behind him, but Tubby had time to slam the door in his face.

"That's foiling him," Tubby gasped triumphantly. "Get the ship out of here, Perfessor!"

GETTING started took only a moment. They dashed to the control

room, the ship lifted, slanted up into the night, and started back for the Solar System at full speed. Poor old Sir Newton, Tubby saw now, was really in a bad way. He was so weak he collapsed in a chair, just about starved to death. And he was afraid he was too weak now to eat.

Going into the ship's little galley, Tubby fixed him up a tasty meal, and Sir Newton was grateful and did his best but he had not eaten for two weeks, and now his stomach did not seem to want anything.

For an hour the ship plunged on at a dizzy rate, because the Professor did not yet use the size-change to make them any smaller. Monstrous speed. For a ship that large the distance did not amount to more than a thousand miles relatively to the little Solar System. The starry Universes raced past them in a continuous sputtering stream.

"We better begin to get smaller pretty soon, eh Professor?" Tubby said at last. "We'd smash up the Solar System if we went tearing into it like this."

"Yes," the Professor agreed.

Old Sir Newton now had explained more about the dastardly villainy of the giant Trask. The superstitious fellow, frenzied with his own conceit, who would have wrecked all the planets just to prove that he was right.

"You see," Sir Newton explained, "we—we got into a big argument. That dastard Trask just idolizes Ptolemy. So he says to me, 'Ptolemy was the greatest astronomer who ever lived.'"

"Ptolemy was nuts," said Tubby with profound conviction.

Everything was swell, now. The Professor was about to put the size-change apparatus into action when Tubby remembered he had forgotten to fasten the exit door of the lower port. He mentioned it now to the Professor.

The Professor turned deathly pale.

"Oh dear, that could be dangerous," he said. "Go lock it at once. If it should jar loose when we start changing size, all our air would escape."

Being so clever Tubby realized at once what a catastrophe that would be.

So he hustled to the stern of the vessel to make things all tight and shipshape. But before throwing over the locking levers he chanced to glance out of a rear porthole. There, clinging to one of the tail fins was the scoundrel Trask, just as big and as mean as ever. He was holding on like grim death. Maybe this accounted for the drag in acceleration the Professor had mentioned several times.

This made Tubby as mad as hops. He flung open the door and shouted to attract Trask's attention.

"Let go," he yelled. "Can't you see you're cutting down on our speed? Don't you know you belong back at the Ragged Edge of Things instead of here in the Solar System?" Tubby happened to glance about then, and noticed they were skimming through such familiar planets as Neptune, Saturn and Jupiter. Beyond was the good old Sun, looking quite furbished up, better than Tubby had previously realized. "There. Off to the right is the Sun and old Earth. While you're about it, take a look and see for yourself which revolves around which."

But instead of calming Trask down that made him angrier than ever. Tubby had never guessed he had such a long reach, for Trask suddenly thrust out a strong hand and grasped him around the neck.

"You lie!" screamed Trask. "I'll teach you to contradict me."

With this he plucked Tubby right out of the space ship and let go of the fin. Tubby tried to argue but Trask was past debating anything. With a frenzied bellow he groped about, seized the Sun in one hand and brought it down with crushing force upon Tubby's skull. And the Sun not Tubby's head was smashed to fragments.

"That does it," moaned Tubby, just

as his senses fled. "There goes the Solar System!"

The next thing he felt was pain in every joint in his body and a roaring in his head as he regained consciousness. He felt ill and sore. Near him two familiar voices were talking in low tones.

"Look, he seems to be coming to, now," said the voice of his old friend Jake. "The ether is wearing off. Better call the nurse, Gladys."

TUBBY opened his eyes and took a dizzy glance around him. Near him was a wheelchair with a girl in it and he could see the outlines of the gray-white little hospital room. He was in a bed—a tilted bed so that his feet were higher than his head. And here was Jake, anxiously peering at him. And Glad, in her wheelchair, was anxiously smiling.

"What—what happened?" Tubby murmured.

"Seems like you fell backwards off that lecture platform. You had a chair right at the edge of it," Jake said. "So they brought you here. An' they remembered you'd been here with me, so they called me an' Glad. You muster had quite a fall off that platform."

That was obvious. Tubby's head was swathed in bandages. So were both his arms; and one of his legs, wrapped in bandages so it was big as an elephant's, was up in a sling over the foot of the bed. But Glad was smiling; she wasn't mad any more. She leaned forward in the wheelchair, holding up the book on astronomy he had given her.

"It's a swell book, Tubby. Thanks a lot. Astronomy is a wonderful thing."

Jake too was smiling. "You promised you'd be right back from the lecture," he commented. "You sure came in a hurry."

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THE READER SPEAKS

(Continued from page 10)

fiction, this time, Sarge, altho fantasy thru 'n thru. Kuttner always comes up with something worth reading. (That feller and gal certainly pulled a dirty trick on pore ol' Kroo, cuss 'em!)

The novelets were nice, with *Space Command* slightly ahead of the other. *The Invisible Army* had too many scientific objections agin it, else 'twould have rated higher. (The changed mass-size ratio would have made the reduced chaps drop to center of the Earth, like neutronium.)

Venustan Nightmare wuz pitiful. Why not let Oscar J. Friend write stories around the covers, like ya usta? He was good at it.

Trophy wuz fair, but I don't like Japs in s-f. (I don't like Japs, period.)

Moon Trap—too coincidental in structure. The moon just *happened* to have a crater reaching straight to the center. The center of the moon just *happened* to have the much-needed radium. There just *happened* to be a crater directly opposite the other. The hero merely *happened* to be packing a rocket-gun. The vein of lead merely *happened*—well, you probably get what I mean.

Swing Your Lady was up to Kent's usual standard.

Finlay was wonderful, Marchiony fair, Thomas rotten. See if you can lure Schomberg away from those comic mags, wot?

Dat's about all my old Underwood can stand at one time, so I'd better sign off.—1219 N. E. Rose-lawn, Portland 11, Oregon.

You're a hard man, McGee, and we'll slate you for the rockpile if you outcrop with more of this kind of lava. I refer to the Bob Hope style of chatter in your opening barrage. But there's nothing like a little rocket gas to give you a kick, eh? P.S. We liked most of the stories, too.

Frog-eyes, hand me a dirty sleeve valve. This next kiwi is getting rambunctious.

HOW COULD YOU?

By Paul Carter

Please, Sarge! How could you?

After the truly astonishing improvement made by "our" magazine with regard to covers during 1943, this latest atrocity is a horrible shock. It certainly does not augur well for the New Year.

Just look at it—searing red and yellow lettering against a horrible yellow-green background carrying us back to the Not-So-Good Old Days; doll-like heroes in football padding; nonchalant heroine who seems rather bored with the whole thing (do you blame her); Rudolph Belarski's signature on the cover, after we'd so fondly believed he'd been left behind somewhere in the asteroids; and last, and least, that (ugh) *that Thing*.

Sarge, the SFTPOBEMOTCOSFP will have your hide for this. That invincible fraternity, the Society For The Prevention of Bug-Eyed Monsters On The Covers of Science-Fiction Publications, has fallen into decadence since the spectacular victories of last year, and it is only to be hoped that this outrage will arouse its righteous wrath in a storm of blistering letters such as graced your readers' column back in the days of Carl Anderson, Chuck Hidley, Martin Alger and company. Let our battle-cry be: *Remember Winter, 1944 T.W.S.!* And we will remember, for fan-memories are notoriously long.

Tremble in your boots, rash Sergeant, or issue directions to the art department to avenge this abomination directly! Or those things you see when you puzzle Xeno will be around—in the flesh—and no Bromo-Seltzer will be able to help you.

Inside the hallowed portals of TWS, in the realm of art, we find Virgil Finlay—period. The rest of them belong in the place after which *Hades Valley* was named. Virgil, however, is his usual excellent self; in particular the outré and grotesque full-page drawing on page 99. One of Finlay's best in the weird line, in his own typical style. It is sadening to realize how few of his drawings remain to be published, now that he's in the armed services; when they are at last exhausted, fantasy will feel empty for a long time—let us hope not too long.

Fiction: "*Trophy*" is by far the best thing in the issue, cleverly developed to a real punch climax. It just lacks the proverbial "something" to keep it from standing out; a good, sound, logical little

yarn. Is "Scott Morgan" a pen name, or a new find? If the latter—more, by all means.

"A God Named Kroo" was also good. Not even remotely scientific, but good. It's too bad Kuttner didn't have the space to develop his theme just a wee mite further; this "primitive deity" idea is fascinating, and possible ramifications lead on to infinity. This is *not* to be construed as a request for a sequel, please.

"*Space Command*" is a fairly-well-characterized yarn, with several clever Weinbaumish touches, that just doesn't quite jell. "Bookworm-makes-good" is not a very new idea, you know. Nelson Bond used it in a novel just recently, in another magazine. Arthur can be original, so I advise that you accept a more "off-trail" piece from him.

"*Swing Your Lady*"—well, this is well done, and all that, but the primary function of a Pete Manx story is to make us laugh. This wasn't too successful, I'm sorry to say, in that respect.

"*The Invisible Army*" possessed one really clever idea—the use of the Brownian Movement as an argument against exploration within the atom (remember this, Mr. Cummings; next time you rewrite "*The Girl in the Golden Atom*"—and then don't write it. Give us something more original). But the rest of the story was—well—rather hackneyed, to put it bluntly. Rocklynne has done too much of this cheap thud 'n' blunder stuff lately; let's hope he snaps out of it ("*Pirates of the Time Trail*" was quite good).

"*Venustan Nightmare*" was purest trash. It is all too typical of the kind of thing for which T.W.S. used to have its covers painted—or maybe the story's written around an already completed cover, I don't know. Plot: moldy. Writing: creaky. Characterization: stereotyped. Setting: fair—very old. Recommendation: that all future yarns of this type, and their covers, be not permitted to darken T.W.S.'s door again.

"*Moon Trap*"—mmm—to put it mildly, there have been better Amateur Contest yarns than this. It has none of the feeling of the moon and space; as the earth's satellite is fairly close to us, that mood shouldn't be too hard to capture. Also, our hero takes a sinfully short time to traverse a sphere 2,000 miles in diameter—and why didn't he get ray-burns from all that radium? Finally, this plot is one of the most antique of all. The first time I saw it was in a comic strip.—156 S. University St., Blackfoot, Idaho.

P.S. to you, Kiwi Carter. We liked most of the stories, too. So you are just discovering Scott Morgan, are you? While this is one of his first ventures in the science-fiction field, he's an old writer for a number of our aviation magazines. Logical step, wasn't it? From atmosphere to stratosphere.

The old Sarge is beginning to think you space monkeys didn't like the cover or the cover story. Well, we'll pass your comments along to the art department. There's no pleasing some pee-lots.

SPACE ALGEBRA

By George Lewis

Dear Sarge: It seems like Dan Wilhite's sense of seeing is off. I distinctly saw the bow rocket on the front. It was the little protruding rocket under the advertisement about "The Man from the Stars." The bow rockets need not be "stuck out" the front end of the space ship. I now start talking about rocket motors!

The motor is (supposedly) a semi-spherically ended cylinder, it has tubes running from the front end, back end, both sides, and top and bottom. When a rocket fuel is put in it and exploded (Whoa! I'm getting ahead of my explanations. Each of the tubes has a valve that can open and close the tube. The valve in the rear we call A, the valve in the front—B, the valve on the right side—C, the valve on the left side—D, the one on top—E, the one on the bottom—F) and A is opened, the pressure is equalized on both sides and the top and bottom, but the pressure is unequalized at the ends, the pressure on the rear is released while the pressure in the front is still there.

The pressure in the front makes the motor move

forward. The movement is opposite of the valve, so: if A is opened the movement is forward, B—the movement is to the rear, C—to the left, D—to the right, E—down and F—up. It makes no difference where the gases go, so the bent pipe is easily the bow rocket of the rocket ships on the cover.

Sarge! How come you to agree with a low class Kiwi on that subject? I'm beginning to think your real title is—Sargent Saturn of the Mop and Brush Corps. If you can't give the right answer, don't give one.

Ah! The Winter issue! Here's my rating on it: A God Named Kroo—20 Xeno jugs. Need I say more?

Space Command—10 Xeno jugs.

Moon Trap—9 Xeno jugs. That was an ingenious way Cross had of getting out of the crater.

Trophy—7 Xeno jugs. Nice wording.

The Invisible Army—5 Xeno jugs.

Swing Your Lady—3 Xeno jugs.

Venian Nightmare—1 Xeno jug. Why didn't they finish off the monster? How about a sequel to this, huh? The sequel oughta' beat this one.

Keep up your good stories. I am just waiting for the Spring issue.—7910 Brutus St., Houston 12, Texas.

And how are all your little Xs, Ys, Ps and Qs? No foolin', Kiwi Lewis, your rocket motor description was vaguely reminiscent of a Rube Goldberg invention. Open a new keg of aspirin, Frog-eyes; I've got to bone up on my blueprints.

Ah-h-h! Cut your rockets, you junior astrogators. Here comes a gal pee-lot.

SPEED UP THE ISSUES

By Iva Golden

Dear Sarge: I have read TWS for quite a while now so I thought it was about time to tell you what I think of it. Don't be frightened. It isn't as ominous as I make it sound. I like the magazine very much. Being a girl I am no authority but the mag is tops with me.

I am writing to comment on your Winter issue. The story that rates with me is "A God Named Kroo." I thought it was a swell story. Well written and everything. I was sorry that Kroo died in the end. The next best story I think was "Trophy." I like those stories with the ironic endings.

The third best was "Swing Your Lady." Pete Manx is always good. He hasn't been around for a long time. Please have him in the mag more often. "Space Command" comes next. It was nothing to write home about. The usual battle of the captain against the crew. Wherever did you dig up, "Venian Nightmare"? It was a nightmare. Of all the silly, worthless SF stories I have ever read that one sure takes the cake.

"Moon Trap" was pretty good for amateur writing. I should like to try my hand at SF writing someday. I've tried every other kind.

Tell me, Sarge, what does Xeno taste like? I have never had the pleasure of consuming a jug full. Is it good for the girls as well as the boys?

Oh, dear Sarge, please have the editors publish TWS more often than just quarterly. I can't wait that long.—1579 Metropolitan Ave., Bronx, N. Y.

Gal, Xeno tastes like the sparkling dew of early dawn on Venus, it smells like the delightful aroma of the Garden of Blooms in the big oasis on the Martian Red Desert, it reflects the coruscating light like the Cavern of a Million Gems on Pluto, it gives one the expansive grandeloquence of mighty Jupiter, it is the music of the spheres and the nectar of all that you dreamed you ever would be, it—hits you like a meteor at twenty gravities. So you lay off the stuff, see?

About the more often appearance of TWS. You just sit tight (the Sarge will do the getting tight) and as soon as we emerge from the present eclipse of paper rationing we hope to be back on the old schedule.

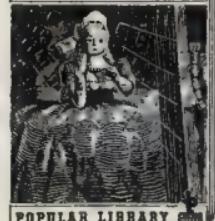
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NEW YEAR'S RESOLUTION

By James Russell Gray

Dear Sarge: Sometimes I think I'll quit writing letters to magazines. I read through a magazine in a hurry so I can get my letter off in time. And then I've got nothing to read. It's a dumb trick. Besides, nobody cares what I think—except me, and I already know that.

I notice you printed the other letter I sent you. I hardly expected that. You even said it was a "nice ethergram." Sarge, you've been bombarded with so much tripe your sense of values has become distorted. You're growing weary; you're adopting a defeatist attitude. My letter was terrible. But thanks for them kind words.

I'm sorry you've been forced to go on a quarterly basis. I realize the necessity, while I deplore the result. Joe Kennedy's cute system of rating the stories with ration points hits closer to the truth than many of the fans seem to realize. Fantasy and science-fiction magazines are dying all around us. Others are being printed less often. Writers are being inducted into the armed forces.

My deductive reasoning (gained from reading the adventures of Sherlock Holmes) tells me that getting out a magazine now is something of a struggle. The thing to do, it seems to me, is for us fans to criticize everything fiercely. It will be such a help. Keep you on your toes, and all that. Or maybe you've got flat feet?

I rather hesitate to rate the stories. All I can do (all anyone can do) is give personal opinions. Get enough personal opinions together, however, and you can strike an average. So here goes. I liked "Trophy" best this time. It's the neatest thing I've seen in a long while. I guess I'd put the Kuttner yarn next. Though I don't like this stuff of assuming that pagan deities really existed.

Rocklynne cops next place with a well-written, fast-moving story. As a rule, I don't like "into the smallness" stories. This one is acceptable. Next spot goes to Kelvin Kent and Pete Manx. I was beginning to tire of this series, but "Swing Your Lady" is so good I'm going to string along for a while yet. "Space Command" was an interest-holding tale. I liked it, though I found the monster a wee bit—unlike. This is a personal reaction, and I realize it is an unfair criticism.

Give "Venusian Nightmare" and "Moon Trap" a tie. Both stories were interesting and nothing to be ashamed of. Ah me, that I could do as well as either! Mind you, I'm not one of those guys that yell, "Don't you dare say aught against you story, sir! You must write a yarn yourself ere you earn the right to criticize another's work!"

Your art work pleased me this time. You've never served up as nice a bunch of drawings before. Finlay, of course, is always good. His work takes first place. Whoever did the illustrations for Kuttner's story comes second. The picture for "Trophy" is third. The cover seems much better than usual. If the babes of the future all look like that black-headed honey—Sarge, don't happen to know anybody who owns a time machine, do you?

A few miscellaneous remarks and I'll shut up. There's a young artist named Ronald Clyne who does splendid work. How's for giving him a trial? Glad to see you're giving us some of Leigh Brackett's stuff next time. Brackett is one of the best writers in the science-fiction field. And she's getting better all the time. Oh, yes, this argument in the "Reader Speaks" section. Some letters are adult, and some are childish (it says here). Come, come, let's not take ourselves too seriously. Let's not be stuffy. Toleration is the thing.

Yours for a better (if a more seldom) TWS—
Box 204, Hartshorne, Okla.

Kiwi Gray, the old Sarge can't say whether your idea would make a good resolution or not. If you birds didn't write in to bellyache, life would grow dull and pointless for the old space dog. (I can't be funny all by myself—although there are other connotations of the word "funny" and several schools of thought.)

Anyway, whenever you think of a pertinent matter to write about—whether adult or juvenile—get hot with the ether. We want this department to reflect just what the readers say and think—and want. That's one gold star you can paste up on the control panel for the old Sarge.

Whatever else we are, this department is fluid and flexible. I assure you solemnly that if erudite scientists were to write abstract theses in a sufficient number for these columns, into these columns they would go—and the old Sarge would be burning the midnight electrons, boning up on the subjects so he could palaver in their own language with the mental giants.

And on the other hand, if our circle of readers get younger and younger, the old space dog will buy a new set of alphabet blocks to talk with.

Next case.

ANOTHER POST-MORTEM

By George Ebey

Dear Sarge: Kuttner deviates between hack and whimsy in the winter issue and finally decided in favor of the former. *A God Named Kroo* has its pleasing points, though. Kroo himself, is a definite character and there are moments of humor in the story. But then there are the usual tangles with the Japs—who seem to have taken over the field, as far as the villain angle is concerned. And the glucose and water heroine and her hefty-but-scientific-hero. Ho plus hum, if you follow.

I notice that TWS is beginning to feature a number of new men—which is all to the good. Scott Morgan scores heavily with his cleverly composed *Trophy*. This one held my interest from first to last; a stock phrase but the honest truth. The Japanese, for one thing, is not presented as a buck-toothed fanatic but a coldly logical character with an evil all his very own. And the ending of *Trophy* was a definite surprise, to me. But then I was never much good at guessing endings. Maybe that's why I liked the story so much.

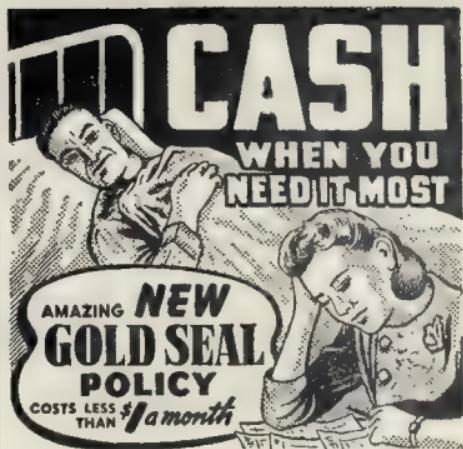
Space Command should rank first in the issue for its length and for the fact that there was nothing really wrong with it. (The last is a rather negative compliment). But while Arthur succeeds in getting his "seat of the pants to strict science" idea over clearly enough *Space Command* is merely another brainy-hero-beats-brawny-jerk yarn. Twas worth inclusion in the mag, but SC's nothing to rave about.

The rest of the stories impress me as being so much filler. Outside of the contest story which I was unable to finish. The *Venusian Nightmare* [Turn page]

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thing was outstandingly poor—the "nightmare" part being very apt. Pete Manx needs a rest. Incidentally, how does Pete rate Virgil?

Which brings us to the artwork, that much bettered part of the magazine. Finlay improves matters tremendously and some of Marchion's stuff is longingly: Schomburg—Schomburg—Schombur

The readers are speaking with a vengeance, it seems, and the bearded mutterings of one S. Saturn are lost in the uproar. It touches this Kiwi's tender heart to see the approbation with which the younger readers have greeted Marty Seligson. "Marty has both feet on the ground!" cries one enthusiast. May I suggest that he plant his posterior on that same ground thus giving his brains a rest.

Marty doesn't like people who say mag and pix—tsk, tsk, tsk. I am almost inclined to agree with him. There is something fundamentally wrong with people who refer to a magazine of science fiction like THRILLING WONDER STORIES as a "mag." And where do they get off calling Mr. Marchion's artistic drawing "pix"? I suggest, Sarge, that you refuse to print letters by such illiterates as the above.

Further reader reactions in the winter issue consist of clever stuff by Karden, and Mace—and sounds! another portrait of the Prime Peletot: ol Saturn himself. Well . . . the puppy in the background is nicely done.

And finally: you may have noticed the lack of comment, by me, on the winter cover. The reason—Balarski, curse him.—1299 California St., San Francisco, Calif.

Dear Kiwi Ebey—and the rest of you space monkeys can stand by and listen, while the old Sarge is quite ready to print most of the stuff that you junior space pee-lets write in—why is it that most of your communiques concern themselves so largely with criticism of the stories and artwork of the previous issue? Sure, we want to know what you birds think. But can't you ever think of anything else to write in?

No wonder the reader department sags like a leaky toy balloon. Plenty of hot air all around it, but not enough helium inside. I—oh, what's the use? Open a fresh jug of Xeno, Frog-eyes.

Understand, Kiwi Ebey, the old Sarge is not jumping on your letter especially. You have other matter in your communiques, and you have written good letters at other times, but this just happens to be the spot where the senior astrogator pauses a moment to needle you space monkeys a little. THE OLD SARGE WANTS SOME GOOD MATERIAL IN THIS DEPARTMENT, TOO!

Here comes a blast from a third section.

WITH PEN IN HAND

By S. T. Brown, 3rd

Dear Sarge: Taking up my pen again, I come charging forward into battle in your letter columns.

Ranking first in this Winter issue is the Pete Manx story, secondly comes a letter from Chad Oliver. Thus with those two assets it was a wonderful issue.

Whatever happened to the Via stories? How's chances for some new Via stories or at least reprints of the series? Next issue lets have an old timers round-up with both a Via and another Pete Manx story. How's about it?

Please do your best to liquidate sourpusses as Don CampBelle? They are kill joys.—Park Lane, Denver, Colo.

Short and sweet, Pee-lot Brown. I don't recall this Don CampBelle spaceteer or what he may have said, but you tear right into him on your own. You ask about the Via series. These stories are temporarily in the sack until the author finishes a few chores for Uncle Sam. Perhaps we will have a fresh eruption of them after we've cured this case of global rash here on Earth.

Comes now a cheer from the Bronx.

PUBLICATION DATES

By Austin Hamel

Dear Sarge: Here's that frugal soul, who, as the sage once said, "Tightly types his message on two small sheets, single-spaced." But this message will not be tightly typed on two small sheets at all. Just because the dean, dean, Sarge does not like it. Instead, I will write this missive on a sheet five by five, double-spaced and dipped in some Chenal No. 5. And, if you don't like it in Chenal No. 5, just return the letter in a self-addressed, stamped envelope, and I will dip it in a jug of Xeno No. 99.

But getting serious, here's the dope on the last issue:

Recently you have been putting out some very good mags. I'm glad to say this was another good one.

The interior art was swell, with top honors going to Virgil Finlay, as usual, and honorable mention to Morey. (Or was that Morey who did "A God Named Kroo"?)

It's hard to say the best story in the mag was the novel, because almost all the stories were really good. But "Kroo" stood out a little bit ahead of the rest, and so takes top honors with 9 jugs.

"The Invisible Army" and "Space Command" pull up very close with 8-9 jugs, and "Trophy" and "Moon Trap" were both lulus. Both get 7-8 jugs.

A brimming jug of Xeno to Kelvin Kent for his colorful character, Pete Manx. "Swing your lady" was really good. Manx is improving very speedily. But gad, I'll be dang-boozled if I'll give another Jug rating! Why I've always used that childish sort of a way to say whether a story is good or not, is beyond me. Maybe Saturn's Mass Hypnotism? You can rest assured you'll not have any more of that sort of stuff from me. But getting back to "Venusian Nightmare"—and, brother, that was a nightmare—same old run of the mill story, not even fair.

How about telling us impatient fans when the three jolly thrilling pubs come out, so we don't have to drive our magazine dealers mad? That's all for now, you nice old man!—2090 East Tremont Ave., Bronx 62, N. Y.

For the duration, Pee-lot Hamel, the jolly three spacers—THRILLING WONDER STORIES, STARTLING STORIES and CAPTAIN FUTURE—are on a quarterly schedule. And thanks for double-spacing your communiqué, kiwi; this lets the old space dog read between the lines.

Let's cut the rockets now and drift into the SCIENCE FICTION LEAGUE area.

SCIENCE FICTION LEAGUE

A GREAT deal of ether action has not transpired in this department since last issue. There are a number of new members, a little hazy rocket gas, and that's about all. Except for one new chapter which was formally founded in Philadelphia—The Philadelphia Futurians.

Here's a letter from the director.

AN IDEA FOR CHAPTERS

By S. Mason

Dear Sarge, you will find enclosed a list of names and addresses of our hard-won new members. We are now, I believe, eligible to membership in the SFL, and I hope you send our charter right away. I think the SFL, although weak at present, can be built up by encouraging new groups to join as more than a promotion stunt. The Philadelphia Futurians are willing to help, if you'll help us by publishing news of us. For instance, an idea for other clubs to increase membership is the enclosed card which cost us only \$2.00 for 500. It can be used as either a postcard or a notice card.

Here it is:

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[Turn page]

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And here's our present membership list:

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Marie Mason, 1617 N. Phillip St.

Jean Bogert, 6447 Overbrook Ave.

Cynthia Bogert, 6447 Overbrook Ave.

Janvier Hamel, 1209 Marlyn Road.

Joseph Selinger, 429 Main St., Darby, Pa.

Vivian Selinger, 429 Main St., Darby, Pa.

Guyon Kendter, R. 1, Oxford Valley Rd., Bristol, Pa.

Pa.

A nice idea, Futurians, and let us welcome you into the SFL as a full-fledged new chapter. As we have said before, these columns are always open to chapters of the League. Of course, we can't undertake to print the minutes of your meetings and such as that, but all news and information of general interest or of national scope can be publicized right here.

For individual members to join the SFL is easy. All you must do is to fill out and mail the application coupon and send the name-strip of this magazine to us along with it. There is no expense and no obligation. Should you desire an emblem to wear, just include fifteen cents in stamps with your application coupon, which will be found in this department, and the old Sarge will send you the niftiest gold, blue and maroon SFL button you ever saw.

THE AMATEUR STORY CONTEST

ALAS, and two alack-a-days! We have no winners to announce this issue, but we solemnly promise to have an announcement lined up for the next voyage. Meanwhile, there is plenty of time for a lot of you kiwis to get in on the next passenger list.

Why don't you send in a story to try for a prize?

The rules are simple. Just type your story out in any length up to six thousand words on one side of standard white paper, double-spacing your lines and leaving about a one-inch margin around the border. Choose any subject you please and inject a science angle of future wonder into it. That's all. The only restriction is that you have never sold a story before.

Address your manuscripts to the Amateur Story Contest Editor, THRILLING WONDER STORIES, 10 East 40th Street, New York 16, N.Y.

The prizes? Payment for winners at our regular professional rates. Honorable Mention for stories that are good but which do not quite make the grade.

Come now, you pee-lots; give the old Sarge something to talk about in this section.

LOOKING FORWARD

HERE we reach the manifest of the cargo for next issue. This is right in the fore hold, almost under the very feet of the astro-gators in the control room. Yeah, we've sort of cleaned up this section and polished the ports.

Gradually we have been weeding out material from this hold that conflicted with or duplicated material found in other departments. From now on you junior pee-lots will look forward through clear ports and gaze

at what lies just ahead. Here's the manifest on the main cargo for next issue.

First, the featured novel stowed away in the main hold will be an amazing yarn by Ross Rocklynne, entitled **THE GIANT RUNT**. All of you fans who think you know Rocklynne are going to get a surprise. For Ross has turned aside from the type of scientific fiction story you generally associate with him and has written a gripping and thrilling novel about a bizarre adventure in Los Angeles.

The old Sarge is not going to spoil this story by telling you all about it here, but you are going to go big-eyed and do some interested oh-ing and ah-ing when you get into this yarn. And it isn't whimsy or fantasy—it's scientific. So you overgrown junior astrogators with the Buster Brown collars can sit down and stop the yammering.

The featured novelet will be a fantastic adventure on the planet Venus, a splendidly written yarn by an old friend and favorite. Sergeant Albert de Pina! Albert is very busy just now in the Air Service of Uncle Sam, but he found time to do **PRIESTESS OF PAKMARI** for us. And it's a honey of a novelet.

Sure, there'll be other stories and articles for you little ogres to whet your appetite and sharpen your teeth on—and you'll find information to this effect in the feature titled **HEADLINERS IN THE NEXT ISSUE** elsewhere in this magazine.

To look further forward from here, we can see that the Axis sun is about to be eclipsed. Mussolini's moon is already down and the others are sinking. It is up to us to see that the job is completed in ship-shape fashion so that nothing else of this sort interferes with our future spacing. So don't forget to keep buying War bonds, fighting the black markets, staying on your job and keeping out of idle rumor talk, gossip, or malicious propaganda.

If we work together, soldier and civilian and ally, the sooner we can get this business cleaned up and the world can go on spacing peacefully again.

Take over, pee-lots; the old astrogator has charted your course. Happy spacing to you!

—SERGEANT SATURN.

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THE STORY BEHIND THE STORY

EVERY reader doubtless has his own method of tackling the contents of a magazine. Perhaps he reads certain features, departments or stories first. Perhaps he just plows right on through. Which ever system you follow—whether you've already read the stories before you come to



this page, or whether you are saving the stories until last—here we present you this issue's story behind the story.

First we hear from Charles W. Harbaugh, author of **STAR OF TREASURE**. Read what Author Harbaugh has to say about the genesis of this month's novel.

A writer has more room to stretch his mental elbows when he's handling a long story, and in *Star of Treasure* I've tried to tackle two ideas, one scientific and one social.

A study of the ancient scientists, and of modern ones as well, can be interesting if it's done in the light of what they were trying to discover as well as what they actually accomplished. Scientists are constantly seeking after the one secret of life—the Big Secret. They're uncovering it inch by inch, and have been doing so for thousands of years. Some day they may finish the job and add up all their findings into an answer so wondrously simple and complete that it is likely to be breath-taking.

That's where Professor Oliphant's **basic energy** comes in. It's the cure-all witch doctor medicine that completes all scientific inquiry by answering the last question. It is, I hope, a sensible if imaginative reason for energy. **Basic energy** is not really an idea for a story. As a matter of fact, it's not an idea at all. It's more a desire, or a need. It's one answer to the longing for a simple satisfactory answer to the many billions of questions life constantly poses. And it was with this thought in mind that I had Professor Oliphant discover it.

But there's the social side of the question, too. Have you ever thought what it would mean if we lost the war we're at present fighting? You and I both know we're going to win, but suppose we didn't? Would Hitler establish such a slavery over our world that the word freedom would never again be heard? I don't think so. At the very moment Hitler was celebrating this hypothetical success, the "moving finger" that writes in the book of Destiny would take its pen in hand to be born, perhaps in the year 3000.

The men of the future will never lose sight of their ancestors' freedom.

The dictators might possibly extend their sway through the thousand years of the future that they boast belongs to them, but the deathlessness of freedom would eventually outlive them. The children of our great-grandchildren's children would win another Yorktown, fighting with rocket inter-

ceptors, possibly, instead of the muskets and cannon that defeated Cornwallis.

If you look at it this way, the things we are fighting for can never be lost. Our war to preserve freedom is simply a stage in Earth's constant evolution toward the perfect. And if we secure a victory for ourselves, that makes the part we play in this gigantic scheme all the more important.

These are the thoughts I had in mind when I wrote *Star of Treasure*, and I hope you'll like the way I handled them in the yarn.—Charles W. Harbaugh.

It seems that Mr. Harbaugh has thought rather deeply on the ideas he hands us in this yarn, and his letter smacks of good old downright patriotism as well as hope for the future of mankind as a whole.

Let's read now what Miss Leigh Brackett has to say about **VEIL OF ASTELLAR**.

You want to know how I came to write **THE VEIL OF ASTELLAR**? Well, one day I happened to read Dunsiny's tale, **THE MAN WITH THE GOLDEN EAR-RINGS**. It's a fascinating little thing, and the end stuck in my mind: "And he said, 'I work in the Sargasso Sea, and I am the last of the pirates, the last left alive.' And I shook him by the hand I do not know how many times. I said: 'We feared you were dead.' And he answered sadly: 'No. No. I have sinned too deeply on the Spanish seas: I am not allowed to die.'"

I have sinned too deeply. I am not allowed to die.

What more do you need for a story germ? It worked in me like yeast in dough. The Sargasso Sea is old and cramped, but in the gulfs of space there must be worlds and ways of sinning on them that man on this mundane pebble has never thought of. I got to thinking about that, and gradually the jewel-crystal world of Astellar and its black gateway beyond space and time took shape, and with it Shirina and the Vell and the golden Cloud, and the men who were afraid to die. One man in particular—Stephen Vance, the Judas goat who led the sheep to slaughter. The story grew easily, and the deeper I got into it . . .

Presently you're in another space, another time. You can take over any body that pleases you, for as long as you want. You can go between planets, between suns, between galaxies, just by thinking about it. You can see things, do things, taste experiences that all the languages of our space-time continuum put together have no words for. Memories—shades under suns that never burned for you. And the interlocking universes are infinite. . . .

Stephen Vance was afraid to die. But immortality is a long time.

I wish I knew the way to Astellar.—Leigh Brackett.

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